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the American Perfumer and ESSENTIAL OIL REVIEW

COSMETICS · SOAPS · FLAVORS

EST. 1906

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THE PROBLEM OF SUBSTITUTION

YEAR AFTER YEAR the Cosmetic Industry has steadily progressed toward the goal of producing finer and more intriguing products. New items have been added regularly to the ever growing stream. Many an old item has been given a new and more modern guise. Heretofore, substitution has not been necessary.

TODAY, HOWEVER, THE INDUSTRY is faced with many problems where substitution seems the only answer. But a substitute conjures up the thought of inferiority.

WE BELIEVE that inferiority does not necessarily follow a substitution. We prefer to look upon the formulations we do today, to avoid curtailment and restrictions, as the production of an alternate preparation.

OUR ORGANIZATION is uniquely set up to serve you in the production of cosmetic and kindred items with alternates. The 200 man-years of experience of our cosmetic chemists is at your disposal to help you to continue your presentation to the public of acceptable cosmetic items. Furthermore, neither quality nor aesthetic appeal should be sacrificed in the formulation of an alternate. Our Research Department will try to find the way around your difficulty. Our Manufacturing Department can then produce the preparation for you. Our Packaging Department can advise you on current trends and help you with the finishing of the product. We believe we can give your alternate product its own identity without sacrifice in quality, performance, or sales appeal.

AN OPPORTUNITY of placing our unique and complete service before you would be appreciated.

Evans Chemetics, Inc.
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[Manufacturing Chemists with Unique Research Facilities]

NEWS FROM WASHINGTON

by ARNOLD KRUCKMAN, *Washington Correspondent*

WPB cosmetic advisors to be appointed soon

The Cosmetics and Toilet Goods Advisory Committee of WPB will come into existence late in April or early in May, according to present indications. It is planned to make the main Committee thoroughly representative of every phase of the industry. That means a few outstanding individuals will be chosen from each specific part of the industry to counsel and advise the WPB on all industry problems. Obviously the officials responsible for putting the Committee together will turn to the trade organizations of the industry for guidance. But aside from help from these sources apparently assistance will be welcome from any member of the industry who has the impulse to send along an idea. Communicate with Ken D. Caldwell, Room 3307, New Social Security Building, Washington, D. C. He is now listed as Assistant Chief of the Toilet Goods and Cosmetics Section of WPB. H. T. Rosenfeld who was serving as acting chief of the toiletries and cosmetic branch has retired and he has been replaced by C. A. Willard who is now the active business head of the Cosmetics and Toilet Goods Section. Like most other WPB units the Section is still in a fluidic state. It will have a greater working staff a month from now.

Advisory sub-committees for each branch of field

It is considered likely the real Advisory Committee drive and energy will come from subcommittees. WPB usually takes a few members from the main Advisory Committee and builds around them an added membership chosen from specific branches of an industry. These persons then function specifically upon the phase of the particular business they know best. For example, it is anticipated Toilet Goods will have its own special subcommittee; also that there will be a Cosmetics Subcommittee; and subcommittees for Barber Supplies, Beauty Parlors, for Soaps, Flavors, and for Importers. There will also be subcommittees for private label manufacturers, for standard label manufacturers, and for those who operate jointly both private and standard label productions. Subcommittees will be formed of groups that have similar problems and in which there are enough problems to warrant a Committee.

Essential oil shortage a major WPB problem

WPB people feel the major problems that require study are essential oils and containers. Essential oils, of course, have evolved considerations more definitely clarified than containers. Imports from the Far East have almost been completely cut off, and imports from the Near East are expected to be in the same situation by Summer. Shipping is constantly becoming a more pressing problem, even as it applies to South America. Supplies available in South America are becoming more difficult to import because ships are needed more and more in the theaters of War operations.

Consumer returns may help solve container problem

Containers are an extremely trying problem and are being studied by several sections of the WPB. The Medicinal and Health Section feels there may be an inkling of some solution in the present handling of collapsible tubes. Not only are the used tubes exacted from the people who buy new supplies of shaving cream and toothpaste in retail stores, but those who purchase by mail are required to deposit the used tubes with the postmaster of their mailing points. When they deposit the tubes they send a notification to the merchandiser from whom they order new supplies, their notification being certified by the postmaster who places his rubber date stamp on their letters of notification.

There is an idea brewing in WPB that similar handling may solve some of the difficulties of closures. One of the chief problems is to provide closures, or materials for the closures, of the containers for the various toilet goods and cosmetics. Black plate is almost ruled out by reason of the increasing shortage of metals. Plastics are even more scarce than metals. It is hoped something may be devised which will work to make it possible for consumers to turn in empty containers *with their closures*. This will partly solve the problem of closures and also salvage containers for re-use. Meanwhile the Conservation and Substitution people are making experiments with fibreboard, impervious to moisture; and with asphalt, concrete, ceramics, also with wood, various papers, and other non-critical materials with protective coatings. Glass and silver have come in for much exploration, and gold is considered a probability if the economics can be solved.

Tube manufacturers experiment to save tin

Conservation Order M-43-a requires that collapsible tubes must be limited to 7½ per cent tin by weight. Tin foil is now prohibited. WPB reports that Collapsible Tube Manufacturers Association is testing the serviceability of tin-coated lead tubes and tin-lead alloys. An effort has been made to find a material to make non-metal tubes, but the work has been hampered by need for new equipment, and by scarcity of substitute materials. Production of non-metal containers, under P-79, will be continued until June 30. But specifications have been revised to reduce consumption of paper board in folding and set-up boxes for cosmetics.

Women in men's jobs to be four million more in 1943

Over 4,000,000 women must take men's jobs by the end of 1943, is the warning issued by WPB. These are required in addition to the 25,000,000 men expected to be employed in War work. It is suggested they take the place of some men in the factories of perfumes, cosmetics and toilet preparations, which now use 10,000 workers.

OUR CONTRIBUTION TO THE AMERICAN WAY OF LIFE...

*Sheffalloy

A HIGHLY SATISFACTORY ALTERNATIVE METAL . . NOW READY FOR THE MANUFACTURE OF "SHEFFIELD PROCESS" TUBES

War has interrupted America's tin and other vital metal supplies. Anticipating the possibility of this emergency, our research staff had been working for some time on a suitable collapsible tube alloy that would effect big savings in the metals essential to national defense. Their efforts resulted in an outstanding achievement . . the creation of a highly successful formula . . a metal which we call "SHEFFALLOY". This exclusive trade name will appear on every New England Sheffalloy Tube.

SHEFFALLOY is a blend of various less critical metals and alloys, which are melted, tempered and toughened according to our well known "Sheffield Process". Remarkably strong and pliable, it forms a collapsible tube of fine uniform quality. Although announced only recently, this formula was completely developed in 1941. Exhaustive tests, in the meantime, have proved this new metal satisfactory for Tooth Paste, Shaving Creams, and other products. Used in combination with our big series of VINICOTE* Inner Coatings it provides an excellent container for every conceivable type of tubed product.

SHEFFALLOY is our contribution to national defense . . to maintaining American standards of living. It makes possible a continued, though limited, supply of New England Collapsible Tubes . . the preferred container for so many essential products. Currently, available quantities must be directed through our regular trade channels. Later, when conditions permit, this highly developed alloy will be available to many other buyers of fine collapsible tubes.

New England SHEFFIELD PROCESS TUBES

* Trade Mark Registered

NEW ENGLAND COLLAPSIBLE TUBE CO.

3132 SO. CANAL STREET, CHICAGO • NEW LONDON, CONN. • W. K. SHEFFIELD, 500 FIFTH AVENUE, NEW YORK
THE WILCO COMPANY, 6800 McKINLEY AVE., LOS ANGELES, CAL. • EXPORT DIVISION: 116 NASSAU ST., NEW YORK

A few ounces saved in bottle helps, says WPB

In glass, the purpose is to secure steady production of the lightest practical weight containers in the most practical manufacturing, packing and shipping shapes. WPB warns it will be necessary in many cases to abandon fancy bottle designs in favor of plain, simple cylinders, with less glass and easier to cast. Weight is considered fundamental because a few ounces shaved from casting, multiplied by millions, means vast saving in lifting, carrying, storing and hauling. Round glass containers cool more evenly than square containers and save time in remelting imperfect products. Openings will be made smaller to reduce need for closure containers. The whole subject of containers and closures is being studied also by Department of Commerce in 3,000 factories. Order L-20, which limited the use of cellophane for packaging to March 17, has been extended indefinitely.

Suggested distillers may solve alcohol problem

Industrial alcohol constantly becomes less available. The need for smokeless powder naturally has increased enormously and is expected to grow indefinitely. Sugar, as we know, is very short. Present alcohol production efforts are focussed on substituting more grain for molasses in order to save the equivalent of 550,000 tons of sugar by next year. Public Law 508, approved April 1, will enable beverage distilleries to redistill low proof alcohol made by smaller industrial alcohol plants. This legislation is expected to provide the means of avoiding expensive construction of new plants which would require large quantities of scarce metals and use hoarded electricity. Old and idle plants will supply facilities which will add to production, and it is anticipated late this year all War needs will be met, and that there may be a definite relaxation of the control which now hampers the toilet goods and cosmetic industries.

War cuts off billion pounds of coconut oil

Commerce Department reports one billion pounds coconut oil have been cut off by lack of access to the Philippines and the East Indies. WPB Order, effective April 1, operates to conserve the supply of high-glycerine-yielding vegetable oils. The Order prohibits their use as food or for non-glycerine-producing uses. Coconut oil, babassu oil, and other oils, are included. No soap may be manufactured which contains glycerine. Incidentally, the supply of babassu oil from Brazil has almost been cut to nothing because Brazil is selling the product very profitably to its immediate neighbors who are not getting olive oil from the Mediterranean.

New WPB order cuts honey for flavor

Flavoring materials have been diminished in volume by WPB Order M-118, which puts a limitation on the use of honey. The Order is particularly aimed at manufacturers of soft drinks, medicines, and similar products who formerly used sugar and now have turned to honey. They may use only as much as they used during any corresponding period in 1941, except they may use only 1/3 the quantity they used the last three months of 1941. There is no restriction on its use up to a total of 60 pounds. Only a minimum practicable working inventory may be stored. If you do not deal in honey and you have 1,200 pounds on hand you must file a report with WPB. Purchases of 10,000 pounds and over must be reported. Beeswax also has rapidly become very scarce.

South America studied for essential oils

There are now 12 Department of Agriculture agronomists in several countries of South America developing future supplies of aromatic plants for essential oils. Others are expected to go down as quickly as they can be employed.

Lime output up but hand-pressed declines.

Commerce Department reports exports of distilled lime oil from Trinidad, West Indies, rose from 49,373 pounds in 1940 to 64,798 in 1941, but hand-pressed lime oil dropped from 1,505 to 515 pounds. Raw lime juice exports in 1940 were 110,841 pounds and dropped to 82,361 in 1941. They shipped 443 barrels green limes, 291 barrels more than in 1940. It also is reported that industry, hit by War, seeks a gum base as substitute for chicle, also a domestic source of gum to be used for Gum Arabic, to be odorless, tasteless, yielding mucic and oxalic acid when treated with nitric acid. It must be soluble in water, insoluble in absolute alcohol, and have a specific gravity of 1.487.

Report made on U. S. grown cosmetic ingredients

A Government report reveals that anise is grown in Southern Idaho and Eastern Oregon; coriander, in Idaho; sage in Idaho and Oregon; lavender in Idaho and Texas. Bureau of Mines reports that whiting, fine-grained preparation of calcium carbonate, secured from limestone, marble, chalk, dolomite and pure lime, used in cosmetics, toothpaste, toothpowder, and soap, is produced in commercial quantities in California, Georgia, Illinois, Iowa, Missouri and Pennsylvania. Bureau of Mines, Washington, D. C., has a Circular 7197, to be sent to those who write for it.

Arrange imports through both U. S. and Britain

Import, as well as export, via ships to South Africa, the Red Sea, Persian Gulf, India, must be arranged with War Shipping Administration and British Ministry of War Transport, through the Office of Supervision of Cargo Clearances, at 45 Broadway, New York City. A. A. Alexander represents the United States, and Thomas Wright, the British Government.

Toilet goods taxes bring big return

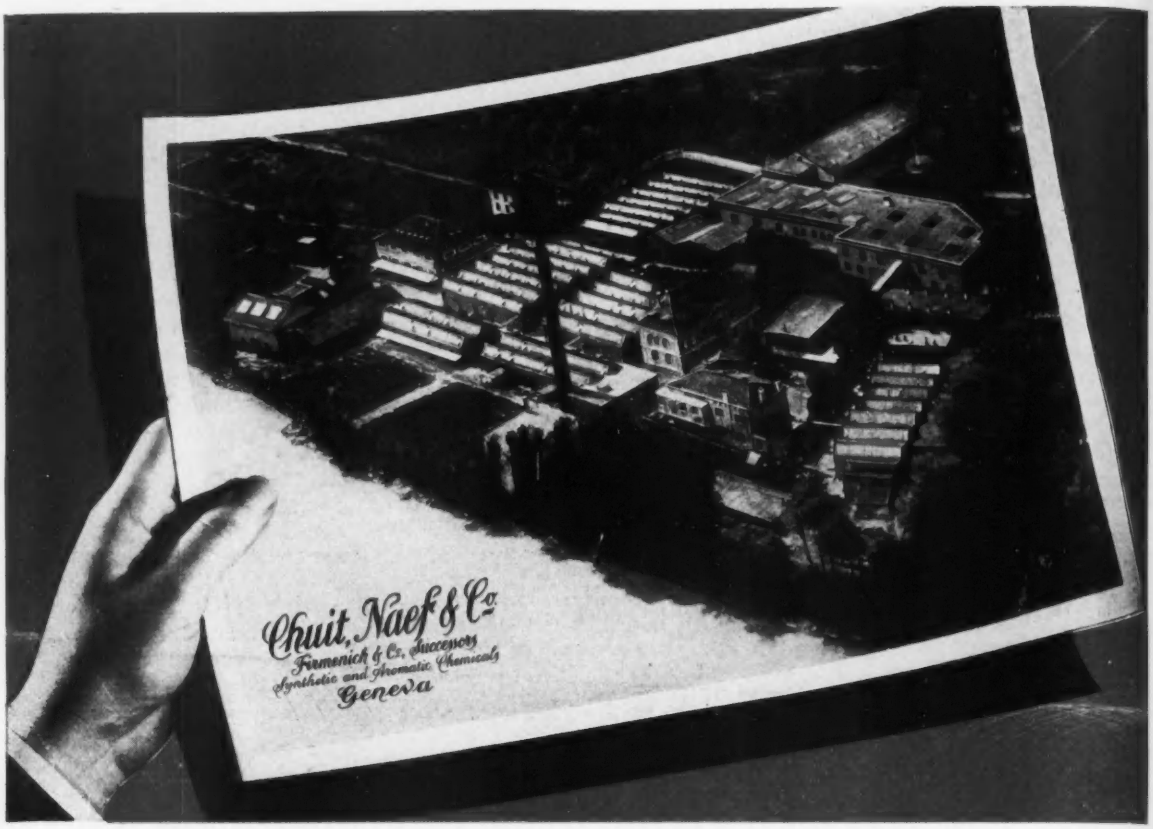
Retailers' excise taxes paid for toilet preparations in February of this year, totaled $3,536,933.40, according to the latest report.

WPB Health Branch should be cultivated

Medicinal and Health Branch, Division of Civilian Supplies, WPB, is making particular studies of the many problems connected with cosmetics and toilet goods. They are just getting into swing and are keenly interested in getting acquainted with those who have anything to tell them. The Branch will undoubtedly have a powerful influence on some of the future decisions that affect the production or limitation of cosmetics and toiletries. While he is not the ultimately responsible official, it is very interesting to get acquainted with Mr. Howard A. Pringle. He is keenly interested, is understanding, and tries to realize the troubles of the man or woman involved in the business.

W.P.B. asks for revised packages

Reductions in density and finish of box board, standardized design and elimination of some sizes are requested by the Containers Branch, War Production Board. The request applies to both folding and set-up boxes and is intended to reduce board consumption. Many of the suggested specifications are already being practiced, according to William W. Fitzhugh, chief of the Folding and Set-up Box Section.



Forty-five Years a Leader

Since 1895 the name of Chuit, Naef has been synonymous with the production of the highest quality group of synthetic and aromatic chemicals obtainable. Today, as then, this reputation continues unmatched.

Throughout these years the Chuit, Naef organization has expanded its products to the point where they now rank as the most complete line of perfume raw materials available to the soap, perfume extract and toilet goods fields.

The laboratories at Geneva, Switzerland, are constantly *showing the way* in the development of new aromatic materials, basic specialties and finished compositions that aid *you* in solving your perfume problems.

As sole United States agents, let us convince you of the remarkable adaptability of our products to your line—*and our ability to deliver!*

FIRMENICH & COMPANY

135 FIFTH AVENUE, NEW YORK, N. Y.

CHICAGO OFFICE: 612 NORTH MICHIGAN AVENUE

WHAT LIES IMMEDIATELY AHEAD?

Gayer and more useful packages on the way . . . Advisable to get help dealers re-train their sales forces . . . Larger market for foot preparations

by RAYMOND W. LYMAN

INGENUITY and resourcefulness are the order of the day. After a few wails on the state of business —as usual, American business proceeds to crack its daily problems. The net result of conditions brought about by the war will be different packaging and a new concept of material handling. In doing the job directly under its nose, business is also looking ahead to after-the-war problems. The new products I've heard about the last few days are actually thrilling. Business wouldn't be business without griping. But it has always found its way out of depressions with new products and it always will.

GAYER AND MORE UTILITARIAN PACKAGES

John J. Reiner, of Lehn & Fink, is typical of the resourceful purchasing agent. When one avenue is shut off, he finds another. His desk is always a picture of the current trend. Today you find on it a string of acetate samples; simpler bottles with brightly-painted tops replacing the fancy bottles and plastic jars I saw the last time I visited him. Miss Dorothy Jones came in for a moment. Just back after a brief illness, we discussed the growing importance of the designer. The more utilitarian the package must be, the gayer it has to be. And, of course, as sizes of bottles and containers become more standardized in the industry, a greater challenge is presented to each designer.

As products from the East Indies, for example, rise beyond levels possible for the average purse, Mr. Reiner sets the chemists to the task of finding a substitute just as good, then perfecting it if possible until it is equal to or better than the original it replaces. And the chemists rise to the task. The amount of research possible for one item constitutes a major problem, however, if one is called upon to do over an entire line. The far-seeing eye of the purchasing agent comes into play at this point. The line is reduced, useless frills eliminated. Then the work begins to see that the basic supply of materials is so that supplies of finished goods to the dealer will be steady and of even quality.

RE-TRAINING THE SALES FORCE

Re-training of the sales force behind the counters was stressed by Lyman Bill of *Sales Management*. He pointed out that they meet the public day in and day out while substitutions and reductions in lines are going on. Considering the salesman the first line of public morale builders, he urged that all sales heads have new training courses to meet the new questions.

"Where is my favorite bronze eye-shadow?" asks a customer in a retail store. The clerk shrugs, "You know all metallic powders are withdrawn for war purposes. We can't get anything any more. I'm sure I don't know what we'll have to sell if this keeps up."

"You're selling this hand cream at a reduced price," the customer ponders on picking up a bottle of her favorite lotion. "Have you cheapened it by using a poorer-grade substitute?" "I'm sure I don't know, madam," answers an indifferent demonstrator.

Re-training will have the clerk picking up a box of brown eye-shadow and selling the customer on its flattering qualities. A re-trained demonstrator will know that the substitute has the same smoothing qualities and is a better mixer than the original was.

Lastly, a comment on how the industry is contributing its share to the war effort and how attractive the new simplified line is, easy on the purse, streamlined new packages to dress up a boudoir table—all this should be the constructive line of approach. Public reaction to these little indirect pep talks is so much better than the drag-down of repeated negative sales-lines.

Feeling the need for reconstructing the sales approach at the counters, manufacturers are now working hard and the executives in charge of training and salons are touring the country with a vital new sales approach. Pulling in the girls for a week's intensive training is another method highly thought of.

CALLING IN DEMONSTRATORS FOR TRAINING

Miss Stephanie Howard, of Charles of the Ritz, particularly endorses the latter method for creating interest in the line and enthusiasm for the firm. The accompanying photograph shows what a marvelous time they gave their training-school group. Hard, intensive daytime instruction hours were followed by evening amusement. The week was planned so the group would get the most out of its New York stay. The final dinner to finish the week had Navy escorts for the firm's guests. The letters of thanks for a wonderful time promised a carry-over of enthusiasm for the products which would be reflected in sales. And the good times followed, you notice, a sound training period.

The days of superficial training schools are over for the duration, I think. And it is well for the public that sales people be better acquainted with the contents of what they're selling. It will cut down returns, establish better relations with the public for the firm's products and co-operate better with the local store.

BETTER SALES METHODS HERE TO STAY

Customers will be glad indeed at the passing of the "snooty" clerk; one who tried to sell something other than the item specifically requested; one who had no idea of where the notion counter was, for example, and indicated definitely that she thought it beneath her dignity to know. Better sales methods are here to stay. Better sales will follow.

More thought than ever is going into fashion coordination. Miss Beryl Blake, of Kathleen Mary Quinlan, is enthusiastic about the simple, dark dressmaker frocks and suits. Boxes and displays can be keyed in with the floral scent predominating in the powder. Sweet pea, for example, appears with sweet peas on a hat. A small nosegay on the shoulder brightens the dark dress. One of the sweet-pea tones is carried out in a ribbon-tie belt and gloves or bag.

MORE FASHION COORDINATION

Since women are doing so much war work, Miss Blake thinks it particularly fitting that the eye kit be featured at this time for complete eye routine and eye care. Practical and feminine.

Have you been noticing the polls of masculine opinion about women in uniform? I'm sure no store executive or manufacturer has missed it. But it's worth repeating. The men don't care what the women wear when they're working. But the moment the stint is over, every man votes for his woman to be as feminine, fragile, dainty as possible. After a long day on their feet, girls will want things easy to change into. Evening shoes will have to look pretty but have support for a change. (A gossip columnist stood by the staircase at a recent important gathering and was appalled at the number of women who wore play shoes and bedroom slippers under their evening clothes. I thought it was too bad all those feet hurt too much to put them into shoes with no support.)

LARGER MARKET FOR FOOT PREPARATIONS

All these new war workers will need good foot lotions, foot powders, eye lotions. Many will need special dirt removers for their hands. Workers in defense plants haven't yet learned, even in England, that powder must not be applied over a dirty face or blemishes are the inevitable result. Some abrasives work into the skin and the defense worker must avoid rouge. Other plants have acids which must be counteracted by special creams before make-up can be applied.

As we move into war work it would pay manufacturers to survey local needs and help to train the cosmetic counter clerks accordingly. If we're going to have an entirely new type of customer to deal with, we'll have to get down to brass tacks in catering to her needs.

BIGGER MARKET IN LOWER PRICED ITEMS

Mr. Nelson and Mr. Henderson tell us we're going to have a great new market in the lower-priced fields. $2,500 is the top income the businessman of today visualizes as his market, now and after the war. That means advertising will be asked to sell quality products in order to avoid inflation. But remember the quality product is what represents quality to the pocketbook of $1,200 to $2,500 a year. The deluxe models for the $25,000 and up incomes are definitely out.

The industrial engineers are working night and day. A visit to Raymond Loewy's office gave a little

Intensive daytime instruction followed by entertainment was utilized by Charles of the Ritz to create interest

picture of what's coming. The new swivel paper lipstick container was what took me there. It has a hard finish, is light in a purse and was worked out when the metal shortage became evident. That is a case in point of the present designers' overcoming of immediate obstacles and shortages.

The work on new plastics for containers some five years hence also goes along in the same shop. New glass usages, new shapes, cheaper models which will wear better than the present ones, amazing prefabricated houses, new trains which will travel at amazing speeds, a plane in every back yard—the things to come are being perfected for the enjoyment of these $2,500 a year income earners. Business and democracy go hand in hand. It's amazing to see business working busily at problems of the future at the same time it cracks those of the hour.

NEW PACKAGING MATERIALS

The loss of the metals has thrown the designers back on the textures of what they have. Mr. Loewy feels that this is a tremendous advantage both to packaging and design. All are taking stock again of the essentials of their materials—looking at them with fresh eyes, seeing new possibilities. When stainless steel and chromium are again available and the great quantities of cheap aluminum once more on the market, the designers will see them also with new perspectives instead of the hunks of metal trim they had gotten into the way of using. New design, new utility will come out of the war.

THINGS TO COME

Black plate is on the way out; most containers are now being readied with paper discs top and bottom; all sizes will be materially standardized, reduced—to handle shipments more easily; paper uses will be tremendously increased as glassware is needed for food processing; glassmakers are asked to increase production by some 50 per cent this year; transportation and fuel increases worry everybody as new war plants go into production and products for civilians are harder to turn out. Ingenuity is necessary to fit into the war effort. A study of the changeover in England shows what to expect here but our resources are so much greater and we are fortunate in not having to import nearly everything we need. Plants are being planned nearer to natural resources they need, rather than near transportation. This also will increase the strain on common carriers which are doing a superb job.

Jean Masbach and the Brockway Glass Co. Inc., are working on standardizing glass bottles. The solution is near. The metal situation for molds is easier. The simpler forms will enable them to step up production.

SURVEYS ON PAPER NEEDS

Surveys taken by WPB on paper needs may surprise the trade. No one can predict in advance what the situation will be when reduced to actual statistics. Everybody guesses and that means we'll probably all be miles off from the real need—either way. What's your favorite prediction?

WHAT LIES AHEAD

Business is going to fall into a different pattern but American resourcefulness has always licked every problem as it arose. This war effort is no different; nor is the job of supplying essential civilian needs. Meanwhile, every time you hear anyone pessimistically yawping—you get over on the constructive side and tell him the good job of adapting to present-day requirements that somebody else is doing. If the country is going to have the greatest peace-time income in years, let's all get a slice of it—then we can pay Mr. Morgenthau and thank him for the privilege of contributing to the war effort. Big business is so busy straining itself to the utmost to quadruple production, it hasn't time to teach the rest of us to get to work and stop growsing. Production built this country; production will keep it safe. Pessimism sometimes has its uses—but today is not the time for it. If we do the job of adapting ourselves to new conditions, distributing our products, bettering public relations, doing a better advertising job—we'll be too busy to be armchair generals. Yours for more work and less talk on the negative side. Constructive criticism belongs in every discussion of a plan's merits, yes; and as a reporter I will try and reflect for you the untiring search of our major executives to supply us and the armed forces with what we need. Machinery becomes a foremost problem but we'll crack that problem, too. Business and our production soldiers are in this scrap to win!

Short Adages

by R. O'MATTICK

THE convolution of Convention Months is almost here again! Ever run into the boys who complain of too many conventions but never miss one of them? Why should they? Do you? I hope not. One of the earliest of the conventions on the long list of those attended by Dr. Rowmeteral is that of the Flavoring Extract Manufacturers Association, Hotel Pennsylvania, New York, May 18-20. (Hope the Publicity Committee sends me a bottle of real good Vanilla Extract for this free ad.) At this convention the story about the one vanilla bean used to flavor 1845 gals. of ice-cream mix will be repeated 1846 times.

* * *

Social Note. Speaking of conventions, Pat Chouli and Otto Stock, two loyal BIMS members, are planning to look over the Canadian TGMA Convention at Lucerne-in-Quebec this year. They are also looking for a girl friend to go along with Rosemary. It seems she has only boy friends.

Domestic Note. Mrs. Rowmeteral has asked Martha time and again never to run short of coffee, ketchup and sugar. "The poor Doctor has so many shortages at his plant," she explained, "that I wouldn't think of shortages at home. And, Martha, please refer to strawberry shortcake as just strawberry cake in the Doctor's presence, during the duration."

Conservation Note. June Ippere is doing all she can to help the war effort. She just had her fingernails cut shorter to conserve on the nail polish supply.

Exchange Note. Otto Stock traded one pound Orris Concrete for a goodly supply of menthol which he couldn't use. He swapped the menthol crystals for heliotropin crystals. These went up in price and when someone offered him two pounds of Orris Concrete for the heliotropin he took it. Someone lost one pound Orris Concrete somewhere. Finder kindly return. Speaking of heliotropin, this is a good time to pronounce it helliotropin.

Certified Note. Mr. Anderson of Kohnstamm writes in to say that "SHORT ADAGES" is "highly colored with fast bright shades of wit and overtones of humor, completely soluble in olive oil." We blush a deep indelible red and thank you for the compliment, Andy. Hope there are still some orders you can fill.

* * *

Rime of the Primary Alcohols

Methyl, phenylethyl, butyl, never gave I thought
to you till
Shortages that came along made you firm and
made you strong.
Little did I have to care when I got you here and
there,
But now you seem to disappear, can I get you there
and here?

* * *

Employment Note. From one of the trade papers —"ABLE LIEUTENANT to assist in directing extensive sales, etc. Apply, stating, etc." The martial tone in Positions Vacant ads is here! Pretty soon you shall see: "CALVARY CAPTAIN wanted to get around and call on our jobbers." or "EXPERIENCED ORDERLY to keep our files in order."

* * *

It will make some of the boys in the perfume and flavor fields feel better to know that "dysophrasia" means an imperfect sense of smell and that "dysgensia" is merely a perversion of the sense of taste. Now when the boss asks, "How did Goodbye like the imitation lavender you showed him?" all they have to do is say, "He didn't appreciate it, the dysophrasiac."

"What about our new and improved Otto which out-ottos otto of rose?"

"That's out! He has a bad case of dysgensia."

* * *

Some more words to help you out when you are out:

Agensia—lack of a sense of taste.

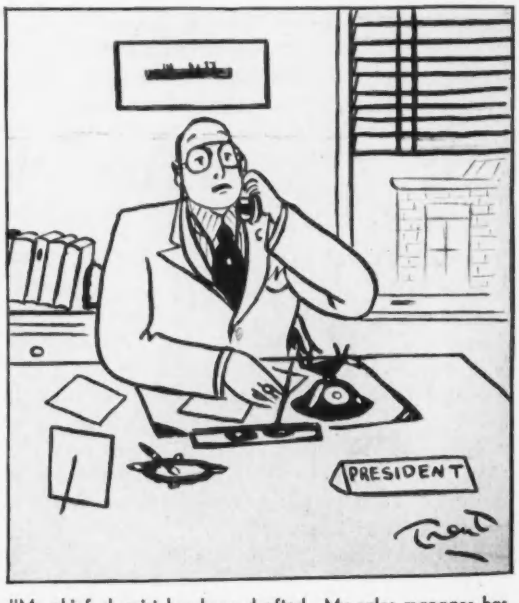
Anosmia—lack of a sense of smell.

We owe all of the above learning to New York *Post's* Neal O'Hara's "Take It From Me" column. I took it from him to give it to you to give to your boss.

* * *

Ye men of stout hearts who shave hurriedly of mornings and swallow coffee, tea, milk and/or rum, or gin and run off to see Johnston about the order he won't accept or Harris about the shipment he didn't promise or to dictate, contrive, amplify, or to get, to go, to push, to plead, or to sit down and phone, converse, convince, telegraph, or just sit down and push buttons, send in your contributions for this column. We can't be considered a real columnist until we get others to work for

R. O'MATTICK.



"My chief chemist has been drafted. My sales manager has volunteered for the Navy, and my secretary is up on the roof looking for enemy aircraft!"

THE SHEER STOCKING THAT ISN'T THERE

Yes, they're "painted" on; either shiny or matt finish

Cosmetics replace silk for hosiery but formulae should counteract hair, spread smoothly, not irritate skin

by H. STANLEY REDGROVE, B.Sc. F.I.C.

COSMETICS preparations for application to the legs to imitate silk stockings, dealt with in so interesting a manner by Maison de Navarre in the September issue of THE AMERICAN PERFUMER, have recently been the subject of considerable attention in Great Britain as a result of the rationing of stockings and other articles of apparel. During the summer months, a considerable proportion of the female population of the British Isles went stockingless, and, even now, that the cold weather is here, a number of women are still braving the elements so far as their legs are concerned. Hence artificial stocking preparations have been in great demand, a demand incompletely met owing to the operation of Limitation of Supplies Orders in relation to cosmetic preparations.

GROWTH OF HAIR ON LEGS STIMULATED

One big objection which has been made against the practice of going bare-legged by many Englishwomen is that, at any rate so far as the popular practice in summer-time is concerned, it encourages the growth of hair on the legs. This is rather a serious matter, since once the growth has taken place, it is not easy to get rid of the hair other than temporarily, and hairy legs are very far from being attractive.

COUNTERACTING HAIR GROWTH

For this reason, therefore, it seems desirable that artificial stockings preparations should contain constituents opaque to the active rays of ultra-violet which encourage the growth of the hair. Possibly a fairly high proportion of titanium dioxide would suffice, but if this means too heavy coverage, then it would seem that a special ingredient, such as methyl salicylate, capable of absorbing ultra-violet, should be incorporated. Mr. de Navarre states "Neither can the cosmetic stocking protect the leg from the elements." It may be, and probably is, true that the majority of the preparations do fail to give any protection, but the ideal preparation should protect from the action of ultra-violet, and this, surely, is not unattainable.

A few months ago, *The Chemist and Druggist* published a number of formulæ for artificial stockings preparations, which I quote below:

LIQUID POWDER

Zinc oxide	6.0
Precipitated chalk	8.0
Kaolin	3.0
Zinc stearate	2.0
Glycerin	3.0
Witch hazel extract	10.0
Orange-flower water	68.0
Color and perfume as required	

POWDER CREAM

Vanishing cream	70.0
Talc	24.0
Titanium dioxide	6.0
Color and perfume as required	

POWDER

Titanium dioxide	3.00
Zinc oxide	20.00
Talc	65.06
Zinc stearate	4.00
Precipitated chalk	6.00
Color and perfume as required	

LOTION

Bismarck brown (1 per cent solution)	79.0
Methyl violet (½ per cent solution)	3.0
Methylene blue (½ per cent solution)	2.0
Glycerin	5.0
Spirit	10.5
Perfume	0.5

These formulæ may serve as the starting points for interesting and useful experimentation, but, in my opinion, the first three are not sufficiently distinctive, while the last contains, in Bismarck brown, a color which has been known to give rise to dermatitis. However, no doubt in the United States, this last formula could be suitably modified by the use of certified water-soluble coloring matters in place of those recommended, while the incorporation of a special reagent capable of absorbing ultraviolet would, for reasons already stated, be definitely advantageous.

CREAM TYPE OF ARTIFICIAL STOCKINGS

The cream type of artificial stockings enjoys a good measure of popularity in Great Britain; but it should be noted that the incorporation of a high percentage of solid matter in ordinary vanishing cream often leads to a product which balls badly when applied to the skin. It is desirable for the vanishing cream employed to be specially formulated. The presence of glycerin or oils, such as liquid paraffin, definitely helps.

One very popular proprietory artificial stocking cream was found on analysis to be highly complex in composition. A satisfactory match, however, was made in my laboratory, by using the following formula.

	Per cent by wt.
Liquid paraffin	1
Glyceryl mono-stearate containing a trace of soap	6
Distilled water	48
Glycerin	15
Titanium dioxide plus earth pigments	21
Talc	9
Perfume	q.s.

Both the original preparation and the imitation were found to be very smooth in application, but neither could be declared to be satisfactorily waterproof.

MATT EFFECT ON LEGS

The effect obtained on the legs was a matt one. Some women, it should be noted, prefer a matt effect, though a shiny one gives the illusion of silk stockings better.

Sorbitol, so warmly recommended by Mr. de Navarre as a constituent of these creams, appears to be now unobtainable in Great Britain owing to the war, though it is possible that some firms in this country may have stocks of it in hand which they are using for the purpose.

VEHICLE FOR THE CREAM

I entirely agree with Mr. de Navarre that creams of the vanishing cream type (O/W emulsions) are preferable vehicles by far to creams of the cold cream type (W/O emulsions); but I consider products based on mucilage of gum tragacanth to be superior to both. Useful constituents, in addition to the necessary earth pigments, are titanium dioxide, magnesium carbonate and magnesium stearate. Incidentally, in Great Britain—and presumably also in the United States—a special grade of magnesium carbonate is available whose particles are coated with stearate. This is an ideal material for use.

ADVANTAGES OF GUM TRAGACANTH

Gum tragacanth is also a most useful constituent of artificial stockings in powder form, a form which is particularly interesting to manufacturers at the present time, because of ease in packing, though naturally its presence, as prices go today, puts up costs of production considerably.

The gum not only gives adhesiveness to the preparations in which it is incorporated, it appears also to improve the waterproof character. Moreover, when the application is made, and the leg is dry, gentle massage produces a shining effect closely imitating that of silk stockings.

Needless to say, powders containing the gum should not be applied dry, but with the moistened palm of the hand.

JAPAN'S VAST CAMPHOR INDUSTRY

Yield of oil . . . Varieties of camphor trees . . . Distillation of camphor . . . Handling of oil . . . Fractionation of crude camphor oil . . . Second installment

by DR. ERNEST GUENTHER

Chief Research Chemist, Fritzsche Brothers, Inc., New York, N. Y.

THE yield of oil of camphor and camphor can be estimated at about 5 to 10 per cent in the roots, depending upon age of the trees, at 5 to 7 per cent in the lower parts of the trunk, and at 2 per cent in the twigs. The average yield is about 4 per cent. This refers to fully matured trees at least thirty years old. The average yield for five to ten-year-old trees is only 2 per cent. The yield of oil of camphor and camphor in the leaves ranges from 0.25 per cent upward.

VARIETIES OF CAMPHOR TREES

There exist six varieties of camphor trees in Formosa and Japan.

1. *Hon-sho*, the main camphor tree. This is the most important variety which occurs wild and has been cultivated extensively during the last decades in Formosa and Japan proper. On the latter island the trees are privately owned, while in Formosa they are government property.
2. *Ho-sho*, the fragrant camphor tree, is the next important variety. It occurs wild and is cultivated in Central and Northern Formosa at altitudes from 1500 to 2500 feet. This tree does not grow in Japan proper.

   The yield of oil in the various parts of the tree ranges from 2 to 9 per cent; it is usually twice as high in the roots as in the trunk. Aside from camphor, this oil contains considerable amounts of linalool, for which reason the natives who were mainly interested in camphor used to call it *shiu* or "stink" oil. Lately, however, the Japanese rectifiers eliminate practically all of the camphor from this oil and market a fraction very high in linalool under the name of *ho* or "pleasant smelling" oil. The leaves of this tree contain an oil of very low camphor content but of strong and pleasant aroma.
3. *Yu-sho*, the camphor *oil* tree, which occurs wild in Southern Formosa at altitudes of about 2500 feet.

   Although morphologically the tree resembles the main camphor tree, its wood has a different odor because it contains only camphor oil with cineol as main constituent and no crystallized camphor. The yield of oil varies from 2 to 3 per cent.
4. *Gyu-sho*, the ox camphor tree which grows wild in certain parts of Formosa.

   Compared with the main camphor tree, the bark of *Gyu-sho* is more of a brownish red; its wood is softer, whiter and juicier. The leaves are dark green and thicker than those of the main camphor tree. The wood yields about 2.5 per cent of essential oil which contains very little camphor. For this reason it is quite easy to distinguish the two trees by just scraping off a bit of wood and smelling it.

Charging still from outside with 250 lb. of camphor chips

Conical wood stills produce 8 to 10 lb. of oil a day

5. *Rau-sho*, the "old, shrivelled, small" camphor tree.
6. *Par-choum*, "empty," a word of Chinese origin.

The last two varieties occur wild in certain parts of Formosa but are of little, if any, importance.

DISTILLATION OF CAMPHOR

Some distilleries operated by the monopoly in Formosa are of more advanced construction and serve their purpose efficiently, but the smaller distillation posts are usually of the old classical type:

These *karenkos* (camphor distillation huts or sheds) each contain a stone hearth, 3 feet high by 2 feet wide, holding a fire kindled with exhausted and dried camphor wood chips. A pan fed with water through a pipe on the side rests on the stone hearth. A conical wooden tank, 6½ feet high and tapering toward the top which is 3 feet wide, stands on the pan, separated from it by a bamboo grid. The sides of the wooden tank are insulated by a thick layer of loam held in place by a bamboo frame. The wooden top can be lifted for charging the chipped wood material into the still. Distillation completed, the exhausted chips are discharged through a side opening just above the grid. Of course, all openings in the still are sealed during distillation so that no steam or oil vapor can escape. The still holds about 250 pounds of chips. Distillation is slow and continues day and night, one charge requiring about twenty-four hours. The daily output of such a still is about 8 to 10 pounds of oil.

During distillation, water is poured, from time to time, into the pan where it is converted into steam. The steam penetrates the chipped material above the grid and carries the camphor and camphor oil vapors through the goose-neck, a simple bamboo pipe, into the condenser. The latter consists of several wooden tanks or one large tank divided into several compartments which are cooled by a basin-like cover filled with running water. Several short bamboo pipes provide for circulation between the tanks and between the compartments, as well as for outlet of the air. Steam, camphor and camphor oil vapors condense in the tank, the camphor settling in the form of white crystals along the walls of the tank and especially on the cooled ceiling.

The liquid distillate is a soft-yellowish-brown, semi-crystalline mass, a mixture of camphor and camphor oil. If the cooler consists of only one large tank divided into several parts, it usually has above and connected with it another, smaller tank, also partly filled with water and water cooled on top, in which vapors escaping from the large tank below are condensed and captured in liquid form. Most of the camphor collects as soggy crystals in the first compartment of the large tank while the oil, which contains a good amount of camphor in solution, collects in the other compartments. The condensed water in the first compartment is led into the second, the third and so on, until from the last one it is piped back to the evaporation pan in the still; in other words, it is cohobated.

The whole distillation apparatus is rather primitive and not very efficient, but it has served its purpose for so many years that the native distillers are loath to make radical changes.

HANDLING OF THE OIL

The united, complete distillate, consisting of camphor and camphor oil, is shipped from the small distillers in the interior to the monopoly which separates it into crude camphor and crude camphor oil. To be specific, the complete semi-crystalline oil containing all camphor obtained by distilling the wood is called the normal camphor oil, while crude camphor oil is the oil remaining after filtering and pressing off the camphor crystallizing in the complete oil.

The complete or normal camphor oil can be separated mechanically (by filtering, pressing or centrifuging) into 30 to 40 per cent crude camphor and 60 to 70 per cent crude camphor oil. The crude camphor upon further purification gives about 75 per cent pure camphor crystals and 25 per cent oil, while the crude oil upon further purification yields about 75 per cent oil and about 25 per cent pure camphor crystals. Thus, the complete or normal camphor oil, as obtained by distillation of the wood, upon final purification and rectification yields about 50 per cent pure camphor crystals and 50 per cent camphor oil.

Refining of the crude camphor is done by the Nippon Camphor Co. which has factories in Kobe and Taipeh. It is then sold to exporters in Japan.

The crude camphor oil, on the other hand, is further treated by either of the following firms:

1. Takasago Perfumery Co., Ltd., with factories in Formosa and Tokyo. They use chiefly the oil originating from Formosa.
2. Nippon Koryo which has a factory near Kobe which works up oil produced mainly in Japan proper.

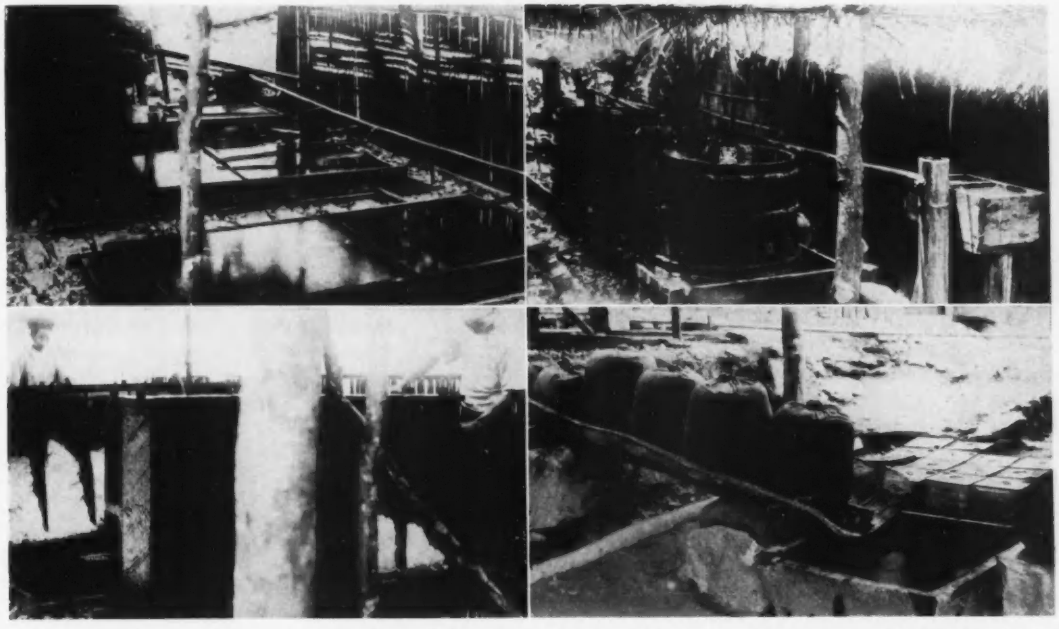
SOLE REFINERS OF CAMPHOR OIL

These two firms are thus the sole refiners of camphor oil; they not only rectify the crude oil into any fractions and isolates but also manufacture derivatives such as heliotropin, vanillin, linalyl acetate and so forth. They supply the local demand and sell abroad through local exporters or through their own agents overseas.

Camphor oil fractions which contain more than 5 per cent of camphor must not be exported. Such lots are turned over to the monopoly, and even inland transactions with private firms are forbidden. The government control in this respect is very strict and penalties severe. Once a month the books and manufacturing records of the refiners are checked.

FRACTIONATION OF CRUDE CAMPHOR OIL

A discussion of this chapter is rather difficult because of the confusing nomenclature which the trade has adopted during the past fifty years. Several well-known essential oil houses in Europe and the United States introduced certain brands according to their own specifications, and for this reason the



Above, camphor crystals remain in water-cooled tanks. Below, coating of camphor crystals on tank interior

Above, smaller tanks condense vapors into liquid and oil. Below, camphor for shipment; crystals in bags; oil in tins

market has become used to a number of fractions distinguished mainly by color. It would be much more logical to classify each fraction by its specific gravity or, still better, by its boiling range. This would help to prevent the mixing of various fractions and adulteration in general.

In former years the rectifying was done mainly in European and American essential oil factories. Recently Japan prohibited the export of crude camphor oil and even of the main fractions of it in order that the Japanese refiners might profit from the sale of those fractions and derivatives which had become so important for numerous technical and pharmaceutical uses.

Crude camphor oil (specific gravity about 0.950 to 0.995) upon rectification gives the following products:[1]

I.) WHITE OR LIGHT CAMPHOR OIL.

Specific Gravity @ 15° C.:	0.870 to 0.895
Boiling Range:	160° to 185° C.
Optical Rotation:	+12° to +32°
Flash Point:	About 48°.

The oil contains terpenes, cineol, small quantities of terpineol, borneol and camphor. It possesses very high solvent properties and is superior in this respect to oil of turpentine and petroleum distillates. Therefore, the main application of this fraction is in paints and lacquers as thinner, in shoe polishes and in the printing industry for the cleaning of types, plates and presses.

Further rectification of the white camphor oil yields:

a) A fraction consisting of all kinds of terpenes which can be used in insecticides and for other purposes. It is also known as aromatic turpentine oil.

Specific Gravity @ 15° C.:	About 0.860
Boiling Range:	From 150 to 170° C.
Optical Rotation:	Around +22°
Flash Point:	Around 40° C.

b) Crude, *synthetic eucalyptus oil* which upon further rectification is converted into refined synthetic eucalyptus or Formosa eucalyptus oil. The oil has a very high eucalyptol content. Shortly before the present war, this oil created quite a stir among the producers and exporters of eucalyptus oil in Australia. It was quoted at very low prices, and its physical and chemical properties resembled those of genuine Australian eucalyptus oil. In reality, however, this oil has nothing to do with eucalyptus and is simply a certain camphor oil fraction.

Specific Gravity @ 15° C.:	About 0.920
Boiling Range:	From 170 to 179° C.
Optical Rotation:	Around +3°
Refractive Index:	1.460 to 1.465
Cineol Content (Orto-cresol Method):	85% to 90%
Solubility:	Soluble in 2.5 volumes and more of 70% alcohol.

Note that these properties fall within the specifications of the USP for eucalyptus oil.

[1] To repeat, there exist no fixed specifications for the numerous fractions; they depend entirely upon the individual manufacturers. The limits given above are, therefore, only approximate.

c) Eucalyptol (cineol), isolated from the synthetic eucalyptus oil.

d) Light camphor oil for sale. This fraction, of which there used to exist different brands, especially on the European market, has limits somewhat narrower than those of white camphor oil.

Specific Gravity @ 15° C.:	0.860 to 0.890
Boiling Range:	160° to 185° C.
Optical Rotation:	Around +25° C.
Flash Point:	About +42° C.

Lots of own importation showed the following properties:

Specific Gravity @ 15° C.:	0.868 to 0.888
Optical Rotation:	+18°48′ to +26°38′
Refractive Index:	1.4673 to 1.4704
Solubility:	Soluble in 0.5 to 4 volumes of 90% alcohol.

Neither the white nor the light camphor oil has been exported during the last few years because they are used in Japan for ore flotation. There has always been quite a demand for these oils in the United States.

e) Borneol (melting point 201° to 204° C.).

II.) CRYSTALLIZED CAMPHOR.

The crude camphor oil contains a considerable percentage of dissolved camphor which can be isolated by fractionation, freezing and crystallization. The pure product is marketed exclusively through the Nippon Camphor Company which supplies the exporters in Japan as well as the market abroad.

III.) BROWN OR RED CAMPHOR OIL.

As the name implies, the oil has a reddish brown color.

Specific Gravity @ 15° C.:	1.000 to 1.035, usually around 1.025
Boiling Range:	210° to 250° C.
Optical Rotation:	0° to +12°
Flash Point:	Around 106° C.

A sample which the writer procured in Japan in the early part of 1939 showed the following constants:

Specific Gravity @ 15° C.:	1.083
Optical Rotation:	+3°43′
Refractive Index:	1.5305
Congealing Point:	+4.9°
Solubility:	Soluble in 8 volumes of 80% alcohol.

Further fractionation of brown or red camphor oil yields:

a) *Oil camphor sassafrassy.*

Specific Gravity @ 15° C.:	0.970 to 0.980

Lots of own importation varied between the following limits:

Specific Gravity @ 15° C.:	0.971 to 0.981
Optical Rotation:	+1°36′ to +9°0′
Refractive Index:	1.4969 to 1.5009
Solubility:	Soluble in 0.5 volumes of 90% alcohol; sometimes in 1 volume of 80% alcohol.

The oil contains about 25% of safrol, the balance consisting of terpineol, borneol, camphor, sesquiterpenes, and sesquiterpene alcohol. It is a very low priced perfume material of persistent odor useful in soaps, polishes and sprays.

b) *Oil sassafras artificial.*

Specific Gravity @ 15° C:	1.070 to 1.085
Optical Rotation:	+3° to +4°

Own importations showed the following properties:

Specific Gravity @ 25° C.:	1.058 to 1.069
Optical Rotation:	From +0°10′ to +2°
Refractive Index:	1.5208 to 1.5287, usually 1.5271 to 1.5281
Congealing Point:	3.6° to 6.6° C., usually around 6.2° C.
Solubility:	Soluble in 5.5 to 7.5 volumes of 80% alcohol.

The oil contains safrol, terpineol, and camphor, and its composition is very similar to that of natural sassafras oil. Due to its very high content of safrol, the oil congeals at about +6° C. It is a very useful product for the scenting of soaps and does not cause discoloration because it contains very little aldehydes and phenols.

c) Crude safrol and purified safrol. The latter has the following properties:

Specific Gravity @ 15° C.:	1.104 to 1.105
Optical Rotation:	0° to 0°30′
Boiling Range:	230° to 235° C.
Flash Point:	About 140° C.
Congealing Point:	10.6° to 11° C.

Lots of own importation varied between the following limits:

Specific Gravity @ 15° C.:	1.103 to 1.106
Optical Rotation:	Up to +0°8′
Refractive Index:	1.5373 to 1.5380
Congealing Point:	+10.5° to +11.1° C.

Solubility: Soluble in 8 to 10 volumes of 80% alcohol.

From safrol a number of very important derivatives can be made: iso-safrol, heliotropin, intermediary products, protocatechu aldehyde, vanillin, and so forth.

d) Crude and refined terpene hydrate (melting point 116° to 117° C.). It can be converted into terpineol and terpinyl acetate.

e) Terpinolene and a number of other terpenes and by-products. Terpinolene has the following constants:

Specific Gravity @ 15° C.: 0.880 to 0.890
Boiling Point: 185° to 187° C.

f) Residual brown camphor oil.

Brown camphor oil or, as it is also called, basic camphor oil (specific gravity @ 15° C. about 1.025) has not been exported from Japan for quite some time. Of all the camphor oil fractions, this is the most important because it serves as basis for the manufacture of many valuable derivatives.

IV.) BLUE OR GREEN CAMPHOR OIL.

Specific Gravity: About 1.000
Boiling Range: 220° to 300° C.
Optical Rotation: Inactive.

Further fractionation of this oil yields:

a) Refined blue camphor oil.

Specific Gravity @ 15° C.: About 0.980
Boiling Range: 205° to 208° C.

The employment of this fraction is similar to that of heavy comphor oil.

b) Sesquiterpenes.

Specific Gravity @ 15° C.: About 0.925
Boiling Range: 200° to 290° C.

c) Sesquiterpene alcohols.

Specific Gravity @ 15° C.: 0.955 to 0.975
Boiling Range: 250° to 290° C.

These fractions are esteemed for their excellent fixation value. Their properties, especially the high specific gravity, make them dangerous adulterants of East Indian sandalwood oil.

The quantities of blue or green camphor oil available are not large enough to permit regular export.

Until a few years ago there existed on the market a so-called heavy camphor oil which was manufactured mainly in Europe from imported camphor oil. It consisted of fractions of and was similar to brown and especially blue camphor oils (Nos. III and IV). Heavy camphor oil showed a specific gravity of about 0.950 and a boiling range from 270° to 300° C. Oils of own importation had the following constants:

Specific Gravity @ 15° C.: 0.966 to 0.979
Optical Rotation: +9°34′ to +12°24′
Refractive Index: 1.5000 to 1.5088
Solubility: Soluble in 0.5 to 6 volumes of 90% alcohol.

The oil was used in lacquers and for the perfuming of cheap soaps, especially liquid soaps. It served very well for covering objectionable odors of mineral and lubricating oils.

V.) PITCH AND TAR.

(To be continued)

Money Making Cures All

THERE are few troubles in any business that money-making won't cure. Nobody has any notion what conditions are going to be like 10 or 20 years from now. As a matter of fact, we have trouble determining what conditions are going to be like 30 days from now. But I am satisfied that whatever the conditions under which we shall operate in the future, there will still be very few business maladies that cannot be cured by money-making. I am equally sure that if a management cannot make money for all concerned, that management will be in trouble.

Making money means having something left over to jingle in your pocket after deducting all the "deducts" from what you take in. The easy formula for making money is (*a*) to sell more goods, or whatever it is you sell; (*b*) to get a better price for what you sell; and (*c*) to produce what you have for sale at a lower cost.

You can manage with (*a*) alone, or with (*b*) alone, or with (*c*) alone, or with any two of them, but if you want to get the best results, the thing to do is to mix all three and take daily.—*Houlder Hudgins.*

Keep Your Temper

THE following bit of verse, by an unknown author, is particularly timely right now, when so many materials are difficult to procure.

Keep your temper, gentle sir.
Writes the manufacturer,
Though your goods are overdue.
For a month or maybe two.
We can't help it, please don't swear.
Labor's scarce and metals rare.
Can't get brass, can't get dies.
These are facts, we tell no lies.
Harry's drafted, so is Bill.
It's a battle, all uphill.
So, your order, we're afraid.
May be still a bit delayed.
Still, you'll get it, don't be vexed.
Maybe this month, maybe next.
Keep on hoping, don't say die.
We'll free your order bye and bye.—*Patchwork.*

Fourth Dimension in Odors

by DR. RALPH BIENFANG*

SOMETIME in the spring of 1935 the writer was inspired by his colleague, Professor R. Wasicky, and provoked by the use of the word "characteristic" in the description of odors to formulate an analytical procedure for the consideration of odors by his students. This plan was more or less on a straight line or one dimensional basis. Briefly it involved the careful sniffing of the aromatic substance by the student followed by a jotting down of his impression of the odor with regard to its qualities (1) strength, (2) range, (3) clarity, (4) persistency, and (5) esthetic effect. The student was also asked to make a comparison of this odor with some familiar odor.

ODOR CLASSIFICATION

This one dimension treatment gradually led into a two dimensional odor classification which was the subject of a paper in THE AMERICAN PERFUMER of April, 1936. In this treatment by means of a graph the five qualities strength, tone, clarity, persistency and esthetic effect were assigned five degrees of variation running from extreme to extreme. The five degrees for the quality strength were assigned as follows: (1) wood, (2) tea, (3) lilac, (4) cloves, and (5) ammonia. For tone the degrees were (1) smoked meat, (2) burning leaves, (3) pineapple, (4) clover, and (5) iris. For clarity (1) sachet, (2) locust blossoms, (3) rain, (4) turpentine, and (5) menthol. Persistency was listed as (1) violet, (2) apple, (3) anise, (4) neroli, and (5) otto of rose. Esthetic effect was (1) asafetida, (2) cod liver oil, (3) sawdust, (4) coffee, and (5) rose. In carrying out an odor characterization according to this two dimensional plan the student after careful sniffing of the aromatic substance assigned numerical values to the various qualities on the graph and then connected them by means of lines.

In addition to the classification so prepared the student was asked to assign a "note" to each odor which was essentially the same thing as the "comparison" of the one dimensional outline. The reader will perceive that both of these procedures are extremely arbitrary but the writer feels that they were of value more as a means to an end rather than as an end in themselves. He feels that after students have analyzed a number of odors in this manner that they are much better qualified to deal with and converse about odors than before they had had this experience.

THREE DIMENSIONS

Two dimensions naturally led into three. Those chosen were clarity, the axis; strength, the radius; and note, the equator. The axis of clarity was divided into eleven degrees running from zero to ten. This being a range between extreme softness or muffledness and extreme sharpness or penetrative ability. The radius of strength running from the axis of clarity was given ten degrees, one to ten. The equator of note was first assigned three primes, *i.e.*, pinaceous, burnt, and flowery. Six sub-primes were then assigned positions on the equator so that these specific designations there would read pinaceous, mint, citrous, flowery, rosaceous, lauraceous, burnt, umbelliferous, alliaceous and back to pinaceous. Each of these primes and subprimes then was assigned a numerical value of five with ten degrees between each, for instance, five, mint, then six, seven, eight, nine, ten, one, two, three, four, five, citrous. It will be immediately noticed that the upper hemisphere of this three dimensional classification is reserved for clear, sharp, or penetrating odors while the lower hemisphere is for those odors which are of varying degree of softness or muffledness. To assign a three dimensional characterization to an odor, it devolves upon the observer to give it a numerical value for clarity, a numbering for strength and a numerical value for note. The note comparisons have already been presented: those for clarity might be represented by dilutions of menthol, and those for strength by dilutions of benzaldehyde.

FOURTH DIMENSION

The next step would be to add a fourth dimension to the "odor sphere." This would be the time factor or persistence quality. This may possibly be approached through a technique recently developed by the writer. This technique which follows has for its purpose the slowing down of the evaporation phenomena through the intervention of cellophane. It consists of dissolving 3.4 Gms. of No. 88 cellophane in enough acetone C.P. to make a fluid ounce. Eight to ten drops of this stock solution are put in a porcelain well, two drops of desired essential oil are added thereto by means of a half length of soda straw and stirred quickly until homogeneous. With the same straw the mixture is transferred to paper to a depth of approximately one millimeter while still wet and allowed a few moments for drying. The "odor spot" has varying degrees of persistency depending upon the chemical character of the odoriferous substance. It has been noticed particularly through the use of this technique that substances of low molecular weight and mixed substances of simpler composition are the least persistent.

The writer would like to be able to apply this procedure to floral odors in the field so that in collecting of herbarium specimens it might be possible also to make a record of flower scent and include it in a glassine envelope in the folder.

Correspondence on the ideas brought forth in this paper, particularly on this last phase, is solicited by the writer. The address is University of Oklahoma, Norman, Okla.

Getting on is merely a matter of getting up every time you fall down—*Fifth Avenue Protective Assn.*

* Contributions to the Technique and Philosophy of Plant Taxonomy and Geography, No. 2 in Chronica Botanica.

WAR PACKAGING CAN BE GOOD

Don't patch packages—redesign them . . . New materials creating trends less lavish but effective . . . Lower grade paper requires different colors . . . Standard bottles

by GEORGE HERRICK

WAR necessities are making better packages than ever. That may seem to be the comment of a chronic optimist, but it isn't. Ask the designers. Most will agree. Shortages are teaching us, as a nation, that we have been too lavish, too much tied to the tradition of using certain materials considered as essential in both packages and containers. The crisis of war has forced us to reconsider and re-appraise what we use, how much we use and to ask why we use it. The answers are likely to be amazing. If anything like a majority of manufacturers really re-package instead of patch and re-patch there will be a real improvement in all packaging. A glance at what is going on now and will continue in coming months indicates at least a few of the trends.

There are three major causes for the new packaging of cosmetics: paper shortage; impending ink and color shortage; and shortage of metal for new glass molds. The first two are bringing changes in materials used, designs and color. The third is necessitating change in the "wrapping" rather than the bottle or jar, itself.

In paper changes the trend is to reduce quality of board and finish as well as weights used. Redesigning of cartons and boxes is saving from as little as 1/16 in. up to 3 in. on overlaps inside, or by general reduction of dimensions.

Two factors are forcing changes in the colors used on packages; impending or actual shortage of certain colors; effect of paper board quality on colors used. The first factor is directly attributable to war needs and may cause manufacturers who have used these colors as identification in package or trade mark not a little concern. It's a problem that even Washington hasn't solved as yet. The

A typical Woodbury conference where old designs are carefully analyzed before making changes

"war-colors" are primarily the yellows containing chrome and other materials needed directly for war goods. The reds may follow the yellows soon. Reds contain beta-naphthol and toluene, both essential to munitions. Many blues are dependent upon methyl violet. In another form, that chemical is tetryl, needed to make boosters in anti-aircraft shells.

BOARD QUALITIES AFFECT COLORS USED

Change the grade of paper board and it may be necessary to change the color of ink used to print it. Pastels, especially, don't turn out well on the lower grades of board. Lack of chlorine to bleach is making all paper and board grayer than ever before. So, designers are turning to the stronger, more brilliant colors on packages. Miss Lane Marohn, designer for Robert Gair, points out that very soon the expensive, high-pitched colors on cosmetic boxes may be "out" and muted grays and more cheap colors may have to be used, especially on the lower grades of board. These lower grades are more absorbent. Some of them "drink ink." The color effect is changed by the board quality.

Despite possible shortages of many blues, designers are trying to use more of this color on the gray backgrounds of today. The blue tends to "pull out" more white effect from a grayish background, making lettering and design more legible. This tends to make all packaging stronger and more vital in color, at least for the duration.

BOTTLES MAY CHANGE PACKAGES

There is no apparent shortage of glass. But there is a shortage of steel to make the molds for volume produced bottles and containers. So, changes in bottle designs may be few in coming months. Designers see this only as a challenge to the inventiveness in packaging or "wrapping" the unchanged bottle. One leading designer in the cosmetic field is, even now, working on use of molded *papier maché*. Made from such odds and ends as sawdust with a binder, this material can be formed as an all-over covering for a standard bottle exposing only a small portion of the contents. Or it can be molded into ornamental tops for bottle closures. A large and sweeping closure ornament could transform a completely standardized bottle into something quite new.

This is a time for imagination when the designer can break with tradition and custom, says Alexey Brodovitch, who has designed a number of leading cosmetic containers and packagings. Even when there is plenty of all materials, Brodovitch points out that it is often more effective to use newsprint or wrapping paper for an expensive perfume or cosmetic. It's "how" a thing is done, rather than "what" is used.

Georges Wilmet, another designer who has worked in the field of cosmetic containers and packages, sees the present as an opportunity for the cosmetic manufacturer to do something definitely new and different, using materials not appropriated for war. But Wilmet, with other designers, warns against patching and adapting present designs. Forget the traditions of the past. Start all over again on the new package or container, he says.

POINT OF SALE DISPLAYS

There's been a good deal of speculation on what may happen to counter and other displays in the present paper board shortage. So far, point-of-sale advertising is still with us, though cuts are in order to save board. But these cuts have failed to impair effectiveness in most cases. For example: A large drug and cosmetic maker recently brought out a premium offer of two jars of cream with four glass ash trays. The display held the jars on a platform and the trays in front slots. Need to save board has caused redesign before the display offer was in wide circulation. The new design packs the jars and premium in a box. The box forms a step or platform when inserted into the folded display board. The glass trays are inserted in front and on each side of the jars. Including the box packing not previously used, 50 per cent less paper board is needed. War packaging, so far, is by no means the worst thing that could have happened to business.

Menthol from Peppermint Oil

ANOTHER industry turned to the American farmer as a source of raw materials when the Vick Chemical Co. placed an educational order with an essential oil refiner for menthol to be extracted from peppermint oil.

This marks the first commercial use of American peppermint oil as a source of menthol. It is expected that substantial re-orders will be placed in the near future.

Heretofore, menthol has been imported from Japan and China. Experts are of the opinion that the American farmer will retain this new customer. They point out that chemical research has developed new methods of extraction and menthol users show a growing desire for a purely domestic source.

If all menthol users turned to peppermint oil—and the course of war points to some such action—growers of this specialty will have added a large new market. Some 500,000 pounds of menthol was used last year, and essential oil men estimate that it would require at least 1,000,000 pounds of peppermint oil to yield an equal amount of the same grade menthol. At this rate, the market for peppermint oil would be approximately doubled, for roundly 1,000,000 pounds of mint was harvested in 1941.

Farmers in Indiana and Michigan, growing nearly 80 per cent of last year's crop of peppermint oil, will be the greatest beneficiaries of this new demand. West Coast producers account for 20 per cent of output, with Oregon and Washington the major growers.

A sharp increase in plantings of American peppermint this Spring will be necessary to handle the rising demand on the part of menthol users. One plan that has received strong backing in some quarters calls for the extraction of only the excess

menthol from peppermint oil, leaving the residual oil for use as flavoring by chewing gum and toothpaste manufacturers. The menthol content of the peppermint plant can be boosted 5 to 10 per cent, refiners say, by harvesting the crop 10 days later than usual.

Accurate estimates of the increase in plantings necessary to meet the greater demand for peppermint are unavailable. It is thought in the trade, however, that a one-third boost in the 1942 crop is essential to take care of the minimum immediate demand. Further substantial expansion of acreage would be required to meet the mounting demand in future years.

Commercial users expect further increases in prices for peppermint oil, despite large production, because of mushrooming demand.

Trade circles believe it will take two years for the mint harvest to be upped sufficiently to meet all demands. However, more than a year's supply of menthol is on hand. This will act as a buffer until large-scale production and refining of mint oil is attained.

Copyrighting Labels

by ALBERT GRAY

PRIOR to 1939 the Copyright Statute, Section 5, detailing the material subject to copyright, was in part: "The application for registration shall specify to which of the following classes the work in which copyright is claimed, belonged . . . (k) Prints and pictorial illustrations."

On July 31st of that year, this paragraph "(k)" was amended by adding the words, "Including prints or labels used for articles of merchandise."

The month before this amendment was enacted the United States District Court decided the case of Bobrecker vs. Denebeim.[1] There one Samuel Bobrecker had made up a label for whiskey bottles from stock drawings and phrases that, with possibly slight variations, were in general use throughout the trade. The label thus made up neither had originality nor pretended to have.

"In this case," said the Court, "the illustrations were familiar to all users of labels or bottled goods of the character here used. The text in such cases, as merely descriptive matter, is not subject to copyright and, as a matter of art, is only a part of the copyright when it aids or augments the pictorial illustration. The plaintiff, therefore, could not complain because the defendant used similar words in connection with similar pictorial illustrations."

This decision rested on the authority of an old copyright case, Higgins vs. Keuffel,[2] where it was said: "To be entitled to a copyright the article must have been itself some value as a composition, at least to the extent of serving some purpose other than a mere advertisement or designation of the subject to which it is attached."

Whether the decision in the Bobrecker case, occurring as it did only a month before the amendment to the Copyright Law, had any part in the enactment of the additional "Including prints or labels used for articles of merchandise," it is impossible to say.

However, in May, 1941, the United States District Court was again called upon to pass on the law of the copyright of labels, with this 1939 amendment. Again, in spite of this amendment, the court adhered to the doctrine that a label must have value in itself as a composition, as was years before ordained in the Higgins case.

The amendment permitting the copyright of labels is a part of the copyright law. How far the application of the law is extended by this amendment lies in some future determination by a federal appellate court.

[1] Bobrecker vs. Denebeim, 28 Fed Suppl. 383.
[2] Higgins vs. Keuffel, 140 U.S. 428.

Help From Employees

MANY conditions responsible for low output, high errors and the like were corrected as a result of a morale survey among employees conducted by a large Chicago mail order concern. After the survey these fundamentals were adopted as a policy:

(*a*) Build confidence by asking employees and executives for their views before making changes. Get them to open up. They are closer to the subject in question than anyone else, and in most instances can offer valuable suggestions.

(*b*) Recognize employees and executives as human beings by explaining changes to them before making the changes. In other words, let them be a party to the changes and inspire them to take the initiative in making suggestions, recommendations, and revisions. Give them freedom of thought. They may make a few mistakes, but it is the only way anyone has ever advanced.

(*c*) Recognize employees whenever you see them. Be more friendly and get better acquainted with the organization.

(*d*) Pay more attention to people and their idiosyncrasies.

(*e*) Think more about the leadership which is more effective than environment, incentives, or such influences. The executive organization should learn the art of leadership and inspiration.

Six Pfeiffer Scholarships

UNDER a grant from the trustees of the estate of the late Henry Pfeiffer, the College of Pharmacy of the City of New York will offer, beginning with the 1942-43 session, scholarships to the number of six, of the value of $100 each.

The scholarships will be awarded on the basis of financial need, scholarly ability and the personal qualifications of the applicant for the practice of pharmacy. They will ordinarily be awarded to new students for one year only, although students of promise may receive scholarship aid in subsequent years if funds are available. Those holding scholarship appointments will receive one-half of the grant at the beginning of each semester and the amount received must be applied to tuition payments.

desiderata

Comment on new chemical developments and their application in the creation of toilet preparations

by MAISON DENAVARRE

Glycerine Substitutes—It is almost as difficult to get glycerine substitutes as it is to get glycerine itself. One reason for this is that the industry was slow to adopt substitute humectants when such substitutes were offered quite some time before the war. As a result, the demand which was suddenly manifested when we became war conscious has been impossible to meet. It takes time to get equipment and to build plants. In addition, there are more important uses for such new humectants than in cosmetics, thus releasing large quantities of glycerine for war purposes.

Even so, this is a good time to examine your formula to determine if it really needs a humectant. Many lotions don't need one. The emollient effect may be obtained from other ingredients. The amount used in many vanishing, hand and brushless shaving creams is excessive. A little mucilage in some preparations will do wonders in cutting down the amount of glycerine used. Sometimes the use of 1 or 2 per cent mineral oil will replace three or four times the amount of glycerine. We learn these things only when we have to—and you have to, now.

Gray Hair Vitamins—Supplementing the two short articles appearing earlier in THE AMERICAN PERFUMER on the use of vitamins in the treatment of gray hair comes the interesting work of Unna, Richards and Sampson who find that calcium pantothenate not only prevents the graying of hair in piebald and black rats, but restores the color to such grayed hair in from four to six weeks. Now if only someone could hook-up the graying of all hair with a deficiency in calcium pantothenate, we would really have something tangible. Anyway, we seem to be getting closer to the solution of the problem.

Regarding Cans—The smartest long term insurance you can take out—if you have some item packed in cans, such as talcum powder, dentifrice or other powdered cosmetic—is to start a program of advising your customers to save their cans for use with *refills*. At the same time get busy to supply such refills at once. It has always seemed wasteful to throw a nice, lithographed can into the ash can just because it was empty. The average can could stand a lot of refilling and still be usable. The same applies to body powder cartons. A refill is the easiest thing in the world to supply—minus a powder puff. Tough times are ahead if you only could realize it. Get used to them, the slow, painless way.

Allergy—In the article on replacements in nail enamel removers which appeared last month in THE AMERICAN PERFUMER, I failed to include a *caution* regarding the "promiscuous" use of hydrocarbons which are well known allergens. This oversight was directed to my attention by Charles Lachman of the well known Revlon company, who has more dope on solvents and allergy tucked away in his little finger than most of us have in our whole body. It is a privilege to rate comment from such an expert, and a duty to pass it on to my readers. Anyway, you may not have to worry about the solvent replacements because you probably won't have any nail enamel to remove in the first place. The polishing of finger nails is headed for a big change, much as cosmetic package design has gone back to Old Spice and mid-Victorian lace presentations.

Sterile Cosmetics—At this time more than ever before cosmetics should contain a powerful bactericide or bacteriostatic agent. War raises hell with national health. That is why you are constantly being told about getting enough minerals and vitamins, as well as a balanced diet. Why not use cosmetics that have bacteriostatic or germ-killing properties as well? Augment the strong protective mechanism of the skin to prevent multiplication of dangerous germs and thus reduce susceptibility to disease and transference of disease from one person to another. It is the strongest hygienic measure that could be taken. It is the first line of defense in civilian defense.

Collapsible Tube Worry—Out of the frying pan into the fire. That is the shape collapsible tube users are in today. Tin became hard to get. Lead was suggested as a substitute. Suitable coatings were evolved to protect the contents from contamination with lead. And now lead is short, too. Wonder what became of all the gold mines in the good ol' West—the gold mines that turned out to be lead mines more often than not. Lead has not been mined to full capacity, prospectors have told me, and for a long time a lead mine was a white elephant. I am told likewise about copper mines. Low pay mines are still claimed to be closed, but that isn't the point here.

Another good friend, Dr. C. O. Ewing, chief chemist for United Drug Co., relates conclusions drawn from their scads of experiments with tubes. Each tube must be coated for a specific product, since each product behaves differently inside the tube. Contents from tubes under test were assayed for lead content

and were considered to be satisfactory for human use if the lead did not exceed 3 parts per million in the case of toothpaste and not more than 7 parts per million in the case of shaving cream.

So far, the F.D.A. has information on tin-plated lead tubes only. It finds that 7 parts per million seem to be tops for lead take-up by a dentifrice, and but slightly more in shaving cream. The F.D.A. looks at this matter from the point of view of the *final use*, which will govern tolerance on lead in tubed preparations. Something official from the F.D.A. or the collapsible tube industry would be a great help in clarifying the confused situation. Actual trials with finished products are imperative. If the collapsible tube industry has this information it should be published so that the cosmetic industry may *see* it. If not, the collapsible tube people better get busy to find it out.

Face Powder—It seems difficult to convince face powder makers that the days of using zinc oxide as a covering agent are past. That leaves talc, with little or no covering power, precipitated chalk, the magnesias, kaolin, some proprietary covering agents, yea—even starch (if available) may be back in use. Use of these substances requires a complete revision of the formula because of the low covering power of most of these.

Lanolin Replacement—As little as 1 per cent of sorbitol, sorbide or sorbitan oleate will replace twenty and more times its weight of lanolin as an emulsifying agent when used in conjunction with hydrocarbons such as mineral oil, petrolatum and paraffine wax, with water as the internal phase.

Cartons for Jars—Why wait until you are driven to it? Why not start eliminating jar cartons and save the paperboard for other uses . . . right now! There are so many places where you can save paper—and you will have to do it pretty soon.

Shaving Powder—Watch an increase in the sale of shaving powder (shaving cream dried and powdered) as a result of the restriction in use of tin tubes. Such powders now can be made in such a form as to be quite dry under divers conditions.

QUESTIONS & ANSWERS

382. Hair Lacquer Formula

Q: Please send us a formula for hair lacquer and a cream permanent waving solution that can be used for all types of hair. W. B., Ohio.

A: A satisfactory hair lacquer may be made by dissolving from 2 per cent upward of some resinous or high melting waxy compound in alcohol and then spraying it on the hair. Water soluble resins can be used in conjunction with ordinary water, and at this time might be a wiser formulation than the earlier one mentioned due to a possible shortage in alcohol. Formulas for permanent waving solutions are given in *The Chemistry and Manufacture of Cosmetics*, a copy of which you have recently purchased. Look at page 443 and thereafter. If you want a thick creamy type of solution you have to use some of the special emulsifiers that are on the market. One such emulsifier was described in the August, 1941, issue of THE AMERICAN PERFUMER, page 40. If you are interested in this material, please write us.

383. Making Sachets

Q: In looking through THE AMERICAN PERFUMER *I have not found a formula for a sachet. Will you please send one?* S. G., Iowa.

A: The composition of sachets varies considerably. At one time they were based almost exclusively on powdered aromatic substances such as roots, twigs, woods or flower petals. Today most sachets are based on talc or heavy precipitated chalk or some other inert white powder. The aromatic materials mentioned earlier can be incorporated into such a base. Due to the scarcity of some of these natural materials, the inert inorganic materials mentioned are used widely. From 2 to 5 per cent of perfume oil is added to a sachet, inasmuch as the preparation is used as a source of odor by the consumer. To help fix the perfume in such materials, the same fixatives utilized in face powder manufacture may be employed. Five per cent or more of some natural powdered material, such as orris root may be incorporated, if desired.

384. Replacing Acetone

Q: Could you give us some information about nail polish remover? We have difficulties in getting acetone and butyl acetate. C.S., Ore.

A: The March, 1942, issue of THE AMERICAN PERFUMER, page 25, contains a short article describing some of the replacements that might be used in nail polish removers. It should be kept in mind that the hydrocarbons are potential irritants and have been mentioned in the literature as causing some dermatitis by their use in nail products.

385. Zinc Oxide Substitute

Q: If you are familiar with any substitute for zinc oxide that we can use in face powder and that is still available on the open market, we would appreciate being so advised. C.J., Fla.

A: Titanium dioxide is one of the best substitutes for zinc oxide but even this material is beginning to be difficult to obtain. Under separate cover we are sending you the trade name of a recently available zinc oxide substitute, as well as some sources for titanium dioxide. In addition to these, there are other materials that might be used in face powder, but their covering power is definitely inferior. Among those are precipitated chalk and kaolin.

1. ELMO: Photo-Finish makeup, applied with a damp sponge or cotton, is packed in pink plastic. It comes in four shades.

2. THEON: Dancing waves and bubbles cover the bottle for Scent O Foam, concentrated bubble bath, offered in four odors.

3. KERK GUILD: Pink and blue baby shoes, with the same colors on the package, are one of this firm's current novelties.

4. CHARBERT: A track scene is the theme for They're Off. It is comprised of shaving lotion, hair lotion and talcum powder.

5. LELONG: Four slender flacons of floral perfumes are combined in Flower Caddy. Each is tightly capped for handbag use.

6. ELIZABETH ARDEN: Flowers imprisoned in a crystal paperweight inspired Mille Fleurs perfume sequence and make-up.

7. DORALDINA: Two new products are added and this whole line is repackaged. The colors used are ivory, green and rose.

8. McLAUGHLIN-OWEN CO.: Gorjus hair dressing, a white emulsion for conditioning the hair, is now offered at retail.

9. GAMBOA: Should I? products—perfume, cologne, bath oil, dusting, talcum powders—are introduced in rich black containers.

10. YARDLEY: A make-up base is added to the Bond Street series. It is available in three shades, blonde, brunette, tan.

11. HUDNUT: The Violet Sec family appears in a new dress. Pink and yellow are the package colors for this toiletries line.

12. HERB FARM: Pot Pourri from Great Britain is presented in new glass brick packages, ribbon-tied. Matching labels are used.

13. LENTHERIC: Tweed scents these new powder pacts, named "Pleasure Pacts." Four shades are offered in the face powder.

14. ORLOFF: Hand-painted apothecary jars hold the five products offered in Attar of Petals fragrance now being introduced.

15. COTY: An old favorite in perfume inspired this new fragrance family, Muguet des Bois, which now contains four members.

Packaging PORTFOLIO

16. HOUBIGANT: New additions to the Translucid make-up line include foundation-tone, skin freshener, mascara, eye shadow, eyebrow pencil. The family package motif is used for these.

17. REVLON: An Hour Glass package in fuschia and purple shades identifies the new nail enamel and lipstick colors, designated 1942 and 1952. Lipstick cartons appear now at this firm.

SUBSTITUTES FOR NATURAL FLORAL ESSENCES

The growing scarcity of natural floral essences emphasizes the value of high quality substitutes

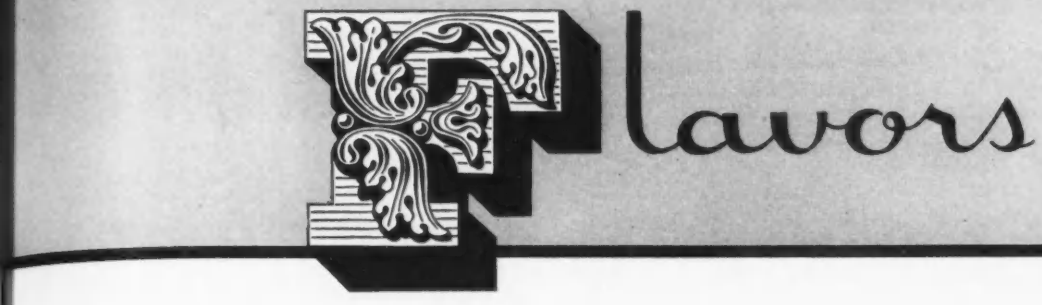
THE international situation is serving to emphasize the fact that there are countless places where synthetic floral essences can replace the natural floral products with a great deal of satisfaction and marked success.

The ingenuity of American chemists is demonstrated by the fact that American made creations not only reproduce the fragrance of the living flowers with marked fidelity and that they may be employed with complete success but that they are also *preferred* in many instances because of the uniformity in quality which they assure to say nothing of the economies they make possible.

If you find difficulty in obtaining any natural floral product write to us for a substitute. All we ask is that you give it a trial.

NORDA Essential Oil and Chemical Co., Inc.

NEW YORK OFFICE: 601 WEST 26th STREET
CHICAGO: 325 W. HURON STREET
ST. PAUL: 253 E. 4th STREET
LOS ANGELES: 2800 E. 11th STREET
CANADA: 119 ADELAIDE STREET, W. TORONTO



VANILLA AND EUGENOL VANILLIN

Primary flavoring constituent of true vanilla extract is vanillin . . . Why its flavor differs from that of cured vanilla beans . . . Vanillin from various sources

by I. J. KENNEDY*

VANILLIN is a definite chemical substance of uniform composition and structure. As a result, it has certain physical and chemical properties which give to it certain characteristics which set it apart from even the closest members of its own group. It contributes the basic underlying character to the so-called vanilla flavor of beverages and food products because it is the principal constituent of this widely used flavor.

VANILLIN IN NATURAL PRODUCTS

Vanillin occurs in many natural products such as the cured vanilla bean, asparagus, beet-sugar and certain balsams. It can be produced by chemical methods from certain compounds possessing more or less similarity to composition and structure. These materials are divided into two main classes, the one comprising substances formed by the vital forces of nature, and the other including products in which natural forces play either no part or a very remote one. The chief material occurring in nature from which vanillin is produced is called *eugenol*, a definite substance of uniform composition and structure. The vanillin made from this source is known in the trade as "Eugenol Vanillin." In addition, a process has been developed within the past few years for obtaining vanillin by processing the waste bi-sulphite liquors occurring in the manufacture of paper from wood pulp. The starting materials are the woods from spruce, pine and hemlock trees, and the vanillin obtained is called "Lignin Vanillin." The chief substance in which natural forces play little or no part and from which vanillin can be made by synthetic methods in *guaiacol*, another compound with definite composition and structure. Vanillin made from guaiacol has been called "coaltar" vanillin, because guaiacol is chemically derived from the simpler substance Benzol which, in turn, is recovered from the coal tar resulting from the coking of bituminous coal.

EUGENOL

Eugenol, the chief vegetable source of commercial vanillin, is derived from two main sources; the clove tree grown on the Islands of Pemba, Zanzibar and Madagascar, all located off the east coast of Africa, and the East Indian cinnamon tree. The properly matured leaves, stems and especially the buds of the clove tree produce on steam distillation and simple subsequent treatment an oil with an eugenol content of over 99 per cent, while the leaf of the cinnamon tree also produces an oil high in eugenol.

Eugenol, owing to its similarity in structure to vanillin, can be converted into vanillin by a comparatively simple process which consists in isomerizing or rearranging its structure to form iso-eugenol which can then be oxidized under controlled conditions directly to vanillin. Various oxidizing agents such as ozone, permanganate of potash, or sodium bi-chromate may be used. The conversion of guaiacol into vanillin is termed a synthetic operation owing to the greater complexity of the vanillin structure as compared with that of guaiacol. In building up the structure of vanillin complications arise and by-products are formed which make the problem of obtaining pure vanillin from guaiacol more difficult than in the case of the oxidation of eugenol.

* Maywood Chemical Co.

SERIES 101 and 102 for Face Powders and Creams

★

These odors have been blended and perfected by our chemists to meet the special requirements of the trade for fragrances for face powders and creams.

ASK FOR A TRIAL SAMPLE

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366 Madison Avenue • New York, N. Y.

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FLAVOR OF TRUE VANILLA EXTRACT

As before stated, the primary flavoring constituent of true vanilla extract is vanillin. The flavor of true vanilla extract differs from that of the straight vanillin flavor not because there is any difference in the vanillin contained in each, but only because the cured vanilla bean, from which the vanilla is made, also contains many substances such as resins, fixed and volatile oils, and other aromatic compounds which impart a *modified vanillin* flavor to the vanilla. When it is borne in mind that vanilla beans when harvested are very inferior in flavor quality to the beans subsequently cured by artificial means, and that the artificial curing process raises the vanillin content from practically nothing to a content of several per cent, it seems difficult to reason that the *addition* of *vanillin*, especially if the vanillin results from a eugenol source, *can be considered as an adulteration of the vanilla.*

PRICE DIFFERENTIAL SMALL

From the start of the present century to within the past few years, vanillin made from products of natural sources was always preferred by the trade and commanded a much higher price than that from coal-tar origin. For the past few years, however, the differential in price for the products from the two different sources has at times amounted to as little as ten cents per pound. This is due in part to the advertising technique of the guaiacol-vanillin manufacturers, and also in no small measure to the dissemination of the erroneous impression that eugenol vanillin is no longer manufactured in any appreciable amount in this country. The eugenol manufacturers sell their vanillin as "eugenol vanillin," the lignin manufacturers as "lignin vanillin," but the vanillin manufacturers using other sources have stressed for the past several years in their advertising messages the subject of improved methods of manufacturing with little or nothing said concerning the source.

During the past year at least 150,000 pounds of eugenol vanillin were made and sold in the United States. The present margin of profit accruing to the manufacturers of eugenol vanillin is too low on account of, first, the price established by the competitive vanillin from other sources, and, second, the relatively high price of the cloves which is the starting material for the production of eugenol vanillin. The price of cloves is relatively high for the basic reason that by far the greater amount of the cloves imported yearly into this country is used as spice and as a result the prevailing price of cloves is set by the spice trade.

Britain Upholds Pepsi-Cola

HOLDING that the trademark Pepsi-Cola does not infringe on Coca-Cola, the judicial committee of Britain's Privy Council, highest court of the Empire, March 22 unanimously reversed a Supreme Court of Canada decision appealed by Pepsi-Cola of Canada, Ltd. Pepsi-Cola Co., announcing the cabled advice from London, stated that this action concluded the Canadian trademark litigation which began four years ago.

Ice Cream Flavoring

WITH little dissent, representatives of member companies in the Flavoring Extract Manufacturers Assn. of the U. S., told the recent Washington hearing on flavors and labeling of ice cream and ices that labels should state use of natural or synthetic flavors. Where a blend of vanilla and vanillin, or other synthetic is used, most of those present indicated the product should state all the facts. Considerable information was also brought out on the need for both fruit juices and extracts, along with stabilizers in ices and sherbets.

Discussion and testimony on vanilla, vanillin and blends of the two, occupied much of the time at the hearing. Facts were introduced as to the amount of vanilla beans imported, sources of supply and methods of extracting flavor from both the vanilla bean and vanillin from other sources.

About 1,000,000 pounds of vanilla beans are annually imported, said Chester A. Smeltzer, Vanilla Bean Importers Assn. He explained that most are from Mexico, Madagascar, the Reunions, Comores Anjourn and Mohli, Tahiti, South America, Seychelles and Ceylon.

Fifty per cent of the ice cream produced contains vanilla flavor, said Robert Rosenbaum of David Michael & Co. and 30 per cent of the manufacturers use pure vanilla, 65 per cent use vanilla extract or sugar with added vanillin and the remaining 6 per cent use vanilla, vanillin and coumarin combinations. These figures, he said are based on a survey by the International Assn. of Ice Cream Manufacturers.

Only ice cream flavored wholly with vanilla from beans should be labeled "Vanilla Ice Cream," according to Dr. Clarke E. Davis, Virginia Dare Extract Co. and former president of the association. He cited the Food and Drug Administration's regulation that an artificial flavor is one containing a sapid or aromatic constituent, manufactured by a process of synthesis or other similar artifice. When a blend of half vanilla and half vanillin is used, he suggested a label to bear the words "Vanilla and Vanillin Ice Cream" or "Vanilla and Artificial or synthetic flavor."

A vigorous note of dissent was introduced by Mr. Rosenbaum of David Michael & Co., who said the association's position was not that of his company. He expressed the opinion that vanilla beans, artificially cured and subsequently used in production of pure vanilla extract or flavor are not a natural food flavoring. Vanilla content of the bean, he pointed out is only about two-sevenths. Furthermore, vanillin from other sources is not artificial or synthetic and is essential to vanilla flavoring. In support of his contention that labeling should not be restrictive to the extent suggested, he cited the

Michigan ice cream act prohibiting use of artificial coloring or flavor and said the Act has brought chaos to the ice cream industry of that state.

However, others who testified at the hearing gave rather uniform support to Dr. Davis's suggestion for specific labeling. Dr. R. J. Rooney, Food Materials Corporation, L. W. Chapin, Vanilla Laboratories, E. A. Neuhaus, Limpert Brothers, and others agreed that vanillin is an artificial or synthetic flavor and should be designated as included when used to flavor a vanilla ice cream.

The need for stabilizers, such as pectin, gelatin, gums or Irish moss in ices and sherbets was stressed by Drs. A. H. Bayer of General Ice Cream Corp. and A. C. Dahlberg of the New York Agricultural Experiment Station. Such stabilizers, they pointed out, tend to reduce size of crystals and increase smoothness. There was also discussion of fruit and juice combinations and coloring in ices and sherbets. Dr. Dahlberg pointed to color as important for eye appeal and the introduction of acids in some sherbets to add tartness. Dr. Bayer cited introduction of lemon to orange juice and the general practice of interchanging fruit juices as necessary to meet demands of public taste. Dr. E. H. Hamann of Fritzsche Brothers also urged use of both true fruit and extractives to produce a better flavored ice or sherbet.

Discussing fruit and juice content of ice cream and ices, Mark J. Ingle, chief chemist, Richardson Corp., said that in his opinion, fruit in ice cream is only a small part of the product and is used principally for flavoring, eye and taste appeal. He testified that the sugar content of fruits for ice cream ranges from 33 1/3 to 55 per cent. Glazed fruits for specialty ice cream, use up to 67 and 75 per cent sugar, essential to preservation. He pointed out that with cane sugar supply limited, more corn sugar will be used. But this is less sweet than cane and more will have to be used to maintain sweetness to satisfy public taste.

Alcohol Tax Situation

THE alcohol situation, progress in non-alcoholic flavors and the recent ice cream hearing in Washington were discussed at the fourth quarterly meeting of the executive committee of the Flavoring Extract Manufacturers' Association.

George H. Burnett, chairman of the Alcohol Tax Reduction Committee, told the meeting that the outlook for securing a tax differential on alcohol for non-beverage purposes is very doubtful. The Treasury Department points to problems of enforcement of such a differential, and also to the national need for revenue from every source for the war. A subcommittee was formed at the meeting to give the alcohol problem further study and present views of the flavoring products industry before the House Ways and Means Committee and Senate Finance Committee. This would cover the proposed increase in tax on distilled spirits from $4 to $6. The committee will recommend a differential in tax on non-beverage alcohol.

There was general discussion of non-alcoholic extracts, flavorings and flavor for the Army, Navy and Maritime Commission and also the awarding of such contracts for flavors to individuals, partnerships and corporations who are not members of the association.

May 18 and 19 were voted as dates for the forthcoming convention and a nominating committee was appointed consisting of Dr. B. H. Smith, Virginia Dare Extract Co., Brooklyn; C. C. Nowland, George H. Nowland Co., Cincinnati; and William J. Sunn, Baker Extract Co., Springfield, Mass.

Lloyd E. Smith, chairman, membership committee reported two new active members, four associate members and the reconsideration of an associate member who had resigned.

Vanilla Beans Arrive

THE arrival of about 3,743 cases of Bourbon vanilla beans which had been long overdue was examined and found to be of good quality. Most of these goods were shipped out directly to extract manufacturers, thus the future of the market does not appear to be at all promising from a supply standpoint. It is understood that importers are working on future steamers, but whether they will be successful in obtaining further shipments largely depends on developments in the war.

The Mexican crop of approximately 100,000 pounds is said to be available for shipment here, but buyers here point out that it is virtually impossible to meet the firm ideas of sellers at the primary center. Future arrivals of Tahiti beans will depend entirely on the number of steamers available to carry the goods. Supplies from Java have been entirely cut off and only a very limited quantity of South American beans is available.

Flavored Ink

SWEET Candy Co., Salt Lake City, added another facet to the history of perfumed ink advertising by running a red and green advertisement for its candies in the *Deseret News*, Salt Lake City. Peppermint flavor was mixed with the red ink, giving the ad an aroma all its own.

Seven Flavors Now

GENERAL FOODS CORP., New York, N. Y., has added a new flavor "Cola" to Jell-O's six flavors. The new dessert will be marketed as the first dessert to include the cola flavor widely used in beverages.

Lemon By-Products

A movement is under way to build a new lemon by-products plant in Ventura County, Calif., to produce lemon oil, citrate of lemon and other lemon by-products no longer imported from Italy. There are a number of established citrus oil concerns in the state already.

EDITORIALS

COLLAPSIBLE TUBES NOT BANNED

UNDER WPB order M-115, toothpastes, shaving creams and other cosmetics may not be packed in collapsible tubes containing *any* tin. There is nothing in the order to prevent the use of collapsible tubes made from other metals such as zinc, or alloys not containing tin. A great deal of attention has also been focused on the use of lead tubes adequately lined with wax or other suitable coatings. Exacting tests have shown that the maximum lead content shown in any preparation packed in such tube is considerably less than 20 p.p.m.—much lower than the requirement for certified colors.

Section 601 d of the Food, Drug & Cosmetic Act decrees that a cosmetic is deemed to be adulterated "If the container is composed in whole or in part of any poisonous or deleterious substances which may render the contents injurious to health." In view of the exacting tests made with properly lined lead tubes, there appears to be no sound reason why such tubes may not be used. There is no adequate substitute for the convenient collapsible tube. It is sanitary, it keeps the contents fresh and it is proof against breakage; and it is especially suitable for toothpastes, shaving creams and certain other cosmetic preparations. While WPB has not officially given the green light to the use of such tubes, it is felt that the inescapable conclusion from the tests is that no objection is liable to be made for their use, at least during the emergency.

BEAUTY SHOP OWNERS AS MERCHANDISERS

NO one who attended the recent International Beauty Shop Owners convention could fail to be impressed with the serious nature of the convention. It is estimated that about 17,000 from most of the eastern states attended the convention. That in itself is significant; but even more so was the careful attention given by the shop owners to the lectures on accounting and sound business methods. Perhaps the most popular feature of the convention was the Merchandise Mart which held daily conferences on new and better ways to merchandise the services of the beauty shop. In other ways, too, it was evident that the shop owners are seriously interested in not only making more money but in rendering a superior and a more dependable service.

YANKEE INGENUITY

NOTHING better illustrates the ingenuity of American manufacturers than the way they have changed almost over night the whole character of their business. A manufacturer of metal specialties for well over a century who developed vanity cases and lipstick holders of metal suddenly blossoms out as a supplier of the same specialties which it fabricates from wood, solving incidentally some problems of tolerances hitherto unsolved by the wood turners. A skilled manufacturer of cosmetics turns up unexpectedly as a manufacturer of airplane parts making good use of a thorough training in engineering chemistry. These are but two instances of many; and they illustrate the ability of American business to adapt itself to the times as ways change and methods improve—a trait that bodes well for the future of the industry and the nation.

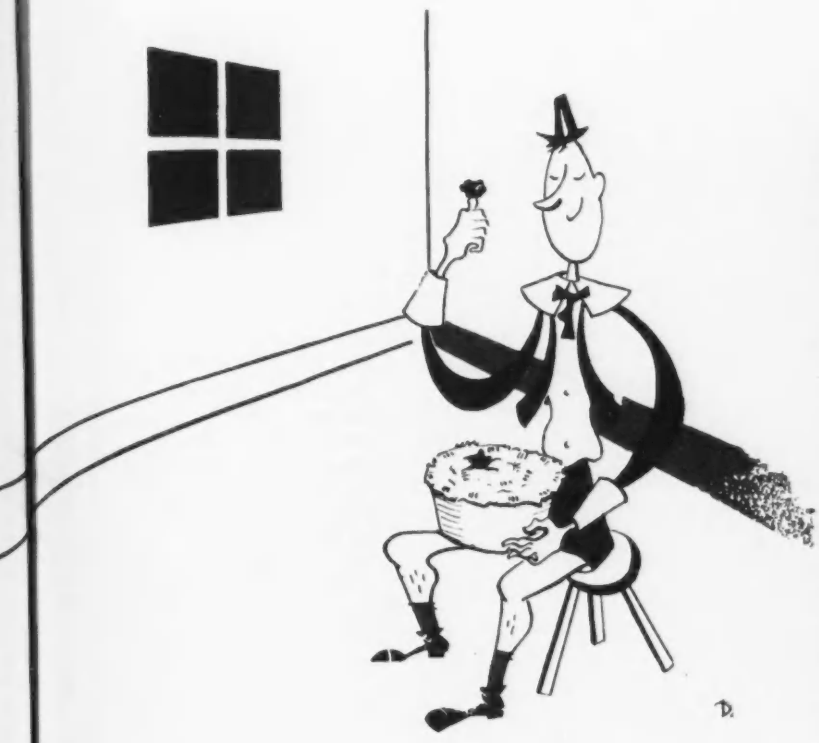
RUSSIA BECKONS

RUSSIA, it has been pointed out, constitutes one of the greatest potential markets for American goods in the world today. The development of the country in the last quarter of a century has undoubtedly been remarkable. An authority on Russian affairs points out that manufacturers who hope to do business in Russia after the war must lay their foundations now. It is true that during the war almost no business is possible. But, it is pointed out, when it ends a great fleet of vessels will suddenly be released to carry American merchandise to countries hungry for merchandise. However, export business is not a matter for overnight development. Before it can begin it is necessary to know what to ship, to have some one to ship to and the goods must be wanted by the people who are to use them. Therefore it is suggested that now is the time for American manufacturers to conduct investigations and otherwise break ground to facilitate subsequent sales effort.

"HE PUT IN HIS THUMB AND PULLED OUT A PLUM"

Replicas of an old Waterford glass decanter jug are the Cologne bottle and the Virginia Reel bottle trio for Campana's Old South. The hobnails and simple outline of the Cotton Blossom Lotion container correspond with the general nostalgic feeling of the entire Old South line.

MAJOR AWARD · COSMETICS (WOMEN)



It's nice to think that office boys can become presidents. And that obscure waitresses can suddenly blossom forth as movie stars.

It doesn't happen very often in real life. And almost never in merchandising.

Practically every Award that was ever won—every market ever conquered—came out of thought and perspiration. That's especially true in packaging.

The three Carr-Lowrey customers—Campana, McKesson & Robbins, Sheaffer—who won Major Awards in 1942, therefore, deserve all the congratulations they get. Their prize winning packages were proved in day-to-day selling even before they were selected by All-America judges.

Like many leaders in the fields of cosmetics and toiletries, drugs, foods, household products, these companies have chosen Carr-Lowrey to produce their glass packages. That the result has been the achievement of packaging's highest honor is news that other packagers may profit by.

Simplicity is the keynote of McKesson & Robbins' after-shaving bottle for Tawn lotion. The squareness and solidity of the design suggest the masculinity of the product. Integrally molded ridges eliminate the slipping hazard often present in using products of this type.

MAJOR AWARD - TOILETRIES (MEN)

Completely organic design sets off Sheaffer's Skrip Ink bottle from its competitors. It features a patented well-filling device for simplified use.

MAJOR AWARD-STATIONERY & SUPPLIES

CARR-LOWREY 3-Point Service

creates

PRACTICAL · ATTRACTIVE · ECONOMICAL

glass packages for cosmetics,

Carr-Lowrey Glass Co.

Factory and Main Office: BALTIMORE, MD.

New York Office: 500 Fifth Ave. — Chicago Office: 1502 Merchandise Mart

PEONY PARENTO

still one of the finest perfume oils!

For creams, lotions and many other cosmetic preparations...pleasant, pervasive, persistent...

Sample gladly furnished on request

Compagnie Parento, Inc.

Executive Offices and Laboratories:
Croton-on-Hudson, N. Y.

NEW YORK • CHICAGO • DETROIT • LOS ANGELES • SAN FRANCISCO • SEATTLE
PHILADELPHIA • TORONTO • COLOMBES, FRANCE • LONDON, ENGLAND

New Products and Processes

Wood containers to replace metal

Cosmetic containers made of hard wood treated to prevent absorption of moisture so as not to be affected by atmospheric conditions are offered by the Scovill Mfg. Co. to replace metal containers. The company which is 150 years old, has been supplying the cosmetic trade with lipstick holders, vanity cases and other containers of metal for many

Lipstick holder and vanity case of wood

years; and when the emergency arose research was undertaken to find out some non-essential material to take the place of metal. Hard turning wood was found to be suitable. The containers may be finished in any way that metal can be finished including lettering and designs of any kind. Where metal is required, such as for catches, sterling silver is used. Prices of the containers, lipstick holders and vanity cases in wood are about the same as for metal.

Heat transfer equipment

A unique and efficient mechanism for heating or cooling of liquids and viscous materials which also offers mixing, emulsifying or aerating simultaneously with heating or cooling is offered by the Girdler Corp. The unit is known as the votator. Features claimed are: it heats or cools in seconds; continuous rapid flow of product through the unit; uniform temperature accurately controlled; a completely closed system; simple design permitting easy cleaning and enabling equipment to be connected into virtually any processing system; and economy. Full details about the equipment including a booklet with charts and reference tables will be sent on request.

Thioglycolic acid and salts

Thioglycolic acid and its salts are now available in quantity at commercial prices according to Martin Laboratories, Inc., which announces that it is now manufacturing them by a new process for which patents have been applied for. Since their discovery in 1873 these materials used in modern methods of hair waving are produced especially for the cosmetic and textile trades. The chemicals offered now are thioglycolic acid, sodium thioglycolate, monoethanolamine triglycolate and calcium thioglycolate.

Luminous blackout paint

A luminous blackout paint which may be applied to objects of all kinds and is said to render them visible in the dark is offered by the Maas & Waldstein Co. The new paint is used over a special primer and thinned out with a special thinner both of which are supplied with the paint. After the paint has been exposed to light for a few minutes it is said to glow for about 20 hours.

Paper lipstick containers

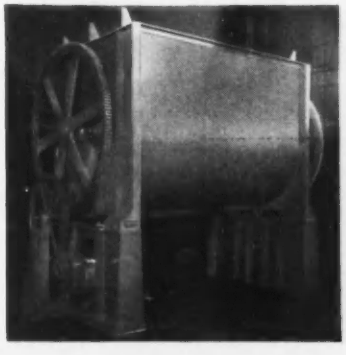
Lipstick and other cosmetic containers made from a special paperboard and plastic are to be manufactured by the F. N. Burt Co. The company is also experimenting with paper bottle caps to be used on screw top bottles.

Synthetic para cymene

Synthetic para cymene (structurally para methyl isopropyl benzene) from liquid terpenes is announced by the Hercules Powder Co. An important use of it is as an intermediate in the manufacture of phenols, carvacrol, thymol and menthol. The essential oil industry consumes substantial quantities of carvacrol in the manufacture of odorants used in soap. It is possible that menthol of U. S. P. specifications can be produced from synthetic para cymene.

Double ribbon type mixer

Fast, efficient mixing is accomplished in the double ribbon type mixer offered by the H. K. Porter Co. by means of spiral ribbons arranged to create a positive folding action on the material inside the cylinder according to the company. Special end seals are provided to prevent contamination of materials being mixed. Full details about it will be furnished on request.



New type mixer

Fawcett color selector

A color selector by means of which women can instantly pick out by name the exact shade of their favorite brand of lipstick and nail polish which best harmonizes with the color of their costumes has been created by Miss Mary Bailey, beauty editor of Fawcett Women's Group. The charts, one of which is designed for drug store display and another for variety stores show actual fabric swatches of 19 of the newest shades for spring. Opposite each swatch appears the harmonizing color name of the lipstick and nail polish. Further details about them may be had from Fawcett Publications, Inc.

No-drip plastic cork coating

No-drip plastic cork coating which may be applied by brush, trowel or spray to prevent condensation or sweating pipes, tanks, walls, air ducts, etc., is offered by the J. W. Mortell Co. Details about it will be sent on request.

New Catalogs

Major Operation has been performed on the name of a leading filter manufacturer—American Seitz Filter Corp. New name of the company is Republic Filters, Inc.

Colloid mills, homo-mixers and other processing equipment offered by Eppenbach, Inc., is described in a leaflet which will be sent to anyone interested.

Mills, mixers and sifters for the drug and cosmetic industries made by the Abbe Engineering Co. are adequately described in bulletin 39 which is available to anyone interested.

Modern appliances for the chemical laboratory manufactured by Eimer & Amend, and the Fisher Scientific Co. are described and illustrated in a 12-page folder issued by Eimer & Amend. It includes the Fisher electrodopode, a new instrument for analysis; a hot plate, modern titration assembly, a refractometer, a unitized bath, a gyrosolver, an infrarediator, mobilometers, clamps, holders, supports, etc. A copy will be sent for the asking.

Superb STYLING

Sleek, graceful lines and sparkling, crystal-clear transparency make Maryland Flint doubly appealing to feminine fancy. Maryland Flint bottles and jars are designed with artistry, manufactured for highest quality. Remember . . . Maryland Flint.

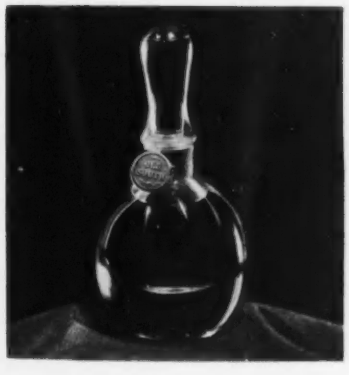
CRYSTAL CLEAR Maryland FLINT

MARYLAND GLASS CORPORATON, BALTIMORE, MD. . . New York: 270 Broadway. Chicago: Berman Bros., 1501 S. Laflin St. . . St. Louis: H. A. Baumstark, 4030 Chouteau Ave. . . Memphis: S. Walter Scott, 435 S. Front St. . . Kansas City, Mo.: Aller Todd, 1224 Union Ave. . . Cincinnati: J. E. McLaughlin, 401 Lock St. . . San Francisco: Owens-Illinois Pacific Coast Co.

Silver Anniversary for this company in 1942, says Innes, Speiden & Co., in its latest number of *Isco News*. The company was established in 1917 as the "Isco Chemical Co.," Niagara Falls, N. Y. Earliest products were chlorine and caustic soda. Later other chemicals were added including absorption, hand lotion and ointment bases for cosmetics. *Isco News* carries a complete list of the company's chemicals although "due to the National War Production program and other causes" many of the items are not available for immediate delivery. However, a note says: "While at this time a large part of the Isco facilities are engaged in production for the Government, civilian needs, too, are being given all possible attention."

Used Equipment, some of which might be useful to cosmetic, soap and other manufacturers is included in the liquidation sale of the former Lion Brewery, 108th St. and Columbus Ave., New York. The sale is being handled by Consolidated Products Co., 17 Park Row, New York, N. Y. Included are tanks, pumps, motors, air compressors and miscellaneous time, temperature and other recording instruments, office furniture and equipment.

Kimble Glass Co., Vineland, N. J., has won two major awards in the All-America packaging competition, one for beauty and another for duty. The artistic, distinctive design of the Kimble container for perfume designed for



An artistic perfume container

Campana Sales Co.'s Old South line won the award for beauty; and the Kimble designed container for Sharp & Dohme's Lyovac Normal Blood Plasma won the award for duty. The Vacule ampul—vial in combination with another Kimble glass container filled with distilled water—permits prompt transfusion in all emergencies without typing or crossmatching of blood.

Oils, Odors and Flavors of the Dodge & Olcott Co., 100 Varick St., New York, are listed in the latest 28-page booklet issued by the company. Prices are quoted in some instances, but of necessity are omitted from many items. Included are essential oils, flavors, oleo resins, vanilla, aromatic chemicals and kindred products for the drug, food, confectionery, perfumery and soap industries.

Books to Aid You

HANDBOOK OF CHEMISTRY AND PHYSICS. *5x7½ in., 2521 pages, imitation leather covers. 25th edition, 1941-1942. Charles D. Hodgman, M. S., editor-in-chief, and Harry N. Holmes, Ph.D., associate editor, with over 200 contributors. 1941-1942. Chemical Rubber Publishing Co. Price, $3.50.*

A new section dealing with the properties of amino acids, enlarged and revised, takes the place of the old one. A table of natural secants and cosecants occupying 15 pages has been included in the mathematical section. In addition, there have been numerous changes of a miscellaneous nature which combined serve to make this most useful handbook of even greater value. There are five general divisions of subject matter which are separated by divisional guides on each of which is printed an outline of the contents of the section. All told, the convenient volume supplies a remarkable collection of chemical and physical data of daily use to the chemist, the engineer and to executives.

PACKAGING CATALOG, *1942. 9½x12 in., 642 pages, thumb indexed, imitation leather covers. Packaging Catalog Co. 1942. Price $2.50.*

Documented facts, classified into 17 sections and the whole divided into 128 separate articles comprise the backbone of this carefully compiled work. Included are six charts to provide at a glance needed data on practically every important phase of packaging. A section on packaging law adds to its value. Sections conveniently thumb indexed include: Design Principles, Packaging Law, Paper Containers, Bags, Rigid Plastic Sheeting, Wrappings, Wood, Leatherette and Pottery, Metal Containers, Glass Containers and Closures, Molded Plastics, Displays, Labels, Seals, Tags; Printing; Adhesives, Machinery and Supplies; Shipping; and Directories.

CONDENSED CHEMICAL DICTIONARY. *Francis M. Turner, editorial director. Third edition, revised and enlarged under supervision of Thomas C. Gregory. 6½x9 in., 756 pages, thumb indexed, cloth covers. Reinhold Publishing Co. 1942. Price, $12.*

This work represents the most convenient reference volume for all desiring quick access to a considerable amount of essential data on chemicals used in manufacturing and laboratory work that has come to the attention of the reviewer. There are over 6,000 new items in this edition which follows the general arrangement of previous editions. Many new encyclopedic type definitions have been added. In every way old items carried over from previous editions have been brought up to date. A feature is the large number of chemical specialties sold under trade or brand names. Typical specifications is a new feature. These were secured from manufacturers and represent a description of the product as marketed and sold commercially.

HOW TO PREPARE A FOREMAN'S POLICY MANUAL. *R. C. Oberdahn. 7x10 in., in three-ring loose-leaf binder with alphabetical indexes and special tabs. National Foreman's Institute, Inc. 1942. Price $6.50.*

Concerns which have been endeavoring to build personnel programs only to find that what they thought best for their employees was poorly received by them will find this useful work of much practical value. Much of management's dismay can be laid at the door of the foreman. This manual places in the hands of the foreman a tool to which he can refer in case of an emergency. It outlines definite company rules, how a foreman is to interpret them, when and under what circumstances, all set down clearly so that every foreman throughout the plant will do the same under similar situations. It is a replica of a manual of procedure for foremen containing various company policies, rules, practices, procedures and regulations listed alphabetically which have been developed by some of the leading companies. The first section covers the foreman's job; the second covers legislation; and the third, and most important, company policies. Policies listed are suggested for use only as a guide.

Business **NOT** As Usual

INDUSTRY is now definitely on a basis of Wartime Economy. Without doubt, it will be necessary to resort to many changes in formulae due to shortages in various ingredients.

•

IN whole-hearted co-operation with the defense effort, it is our steadfast policy to produce maximum quantities of those chemicals for which raw materials are available and which do not interfere with the defense effort.

•

WITH these available materials the soap and cosmetic manufacturer will still be able to achieve the desired results

•

WHOLE-HEARTED co-operation between business and government is absolutely necessary in order that a complete and final Victory, both military and economic, be achieved.

Aromatics Division

GENERAL DRUG COMPANY

644 PACIFIC STREET, BROOKLYN, N. Y.

9 S. CLINTON STREET, CHICAGO 1019 ELLIOTT STREET, W., WINDSOR, ONT.

AMONG OUR FRIENDS

▸ George J. Waegelin, the popular and efficient secretary of George Lueders & Co., New York, N. Y. was honored by his associates March 26 which marked the 25th aniversary of his connection with the company. He is the 31st member of the 25 year club. On arrival at the office he found his private office decorated with flowers and an American flag and a plaque announcing the anniversary. In honor of the event a special luncheon was served at the Dutch Tavern. An informal gathering of employes at noon was held in the offices at which time a service pin and a wrist watch suitably inscribed and an oil painting was presented to Mr. Waegelin.

▸ Percy C. Magnus, president of the New York Board of Trade and head of the house of Magnus, Mabee & Reynard, Inc., delivered one of the ten best speeches on current affairs in February according to *Vital Speeches*. His address on "Synthetic Thinking" delivered at the banquet of the Assn. of Manufacturers of Confectionery and Chocolate of New York state, was chosen with addresses delivered by President Roosevelt, Donald Nelson, Lord Halifax and Father Cannon. The speech has been reprinted in booklet form and a copy will be sent to anyone who requests it.

▸ Sir Henry Dale, Nobel prize winner and president of the Royal Society of London, recently was the guest of the Merck Research Laboratories, Rahway, N. J., which he inspected with a great deal of interest.

▸ N. F. Dahl, well known to the drug and cosmetic trade in the U. S. and Canada for the past 20 years, has been appointed managing director, Lehn & Fink (Canada), Ltd.

▸ Abe Plough, president and head of the large Memphis, Tenn., concern which bears his name, in his annual report to stockholders of the Plough, Inc., reveals that the company has purchased $50,000 of defense bonds and that employees of the company bought them also to the amount of $46,800.

▸ E. H. Little, president of the Colgate-Palmolive-Peet Co., Jersey City, N. J., reported record earnings of $6,604,891 for his company in 1941.

▸ G. W. Jones, administrator of toilet goods, wartime prices and trade board of Canada was the guest speaker at the March 2 meeting of the Toilet Goods Manufacturers Assn. of Canada.

▸ E. M. Laning, Irvington, N. J., and Mrs. Laning have returned from a vacation trip in Florida. While in the South they visited their son, Edwin M. Laning, an officer engaged as an instructor in the training of infantry at Fort Benning, Ga.

▸ Frank R. Steele of Warren E. Burns, Inc., Chicago, Ill., is spending several weeks at the Florida office of the company. The trip was made by automobile.

▸ C. J. McNeel, Honolulu representative for E. R. Squibb & Sons for the past four years, has returned to Los Angeles with Mrs. McNeel. They went through the Pearl Harbor attack in December. Following a vacation, Mr. McNeel, who has been in Honolulu for the past four years, will be attached to the Los Angeles branch in a capacity not yet announced.

▸ W. C. McCormick, Arizona branch manager, Brunswig Drug Co., Los Angeles, Calif., has been elected a director of the company in recognition of his service. Mr. McCormick began his career with the company nearly four decades ago.

▸ H. Herbert Myers is now a vice president of the Charles of the Ritz operating corporation. He formerly was president of Antoine de Paris and later general manager of M. Louis Hair Design Institute.

▸ James Martin, sundries buyer for Brunswig Drug Co., Los Angeles, for the past nine years, has been appointed assistant manager of the Tucson, Ariz., branch, a newly created position.

▸ John N. Curlett of the Flavoring Extract Manufacturers' Association of the U. S., has resigned from the executive committee of the association to take up work in the Food Division of the War Production Board as chief of the Tea, Spice and Coffee Section.

▸ Arthur L. Bender, son of A. Lincoln Bender of *Beauty Culture*, New York, N. Y., will be graduated from Colgate College next month after which he expects to enter the navy.

▸ Frank Pull, Potter & Moore, Ltd., Linden, N. J., and Mrs. Pull have returned from a vacation trip in St. Petersburg, Fla.

▸ Dr. Robert P. Fischelis, secretary of the New Jersey Board of Pharmacy and chief of the Medical and Health Supplies of the W.P.B. spoke on "What the War Means to Pharmacy" at the convention of the New York Pharmaceutical Council in New York, April 14.

▸ Lieut. Peter K. Sheffield, youngest son of W. Kyle Sheffield of the New England Collapsible Tube Co., New London, Conn., was married, April 4, to Miss Mary E. van de Linda, daughter of Mr. and Mrs. Lloyd van de Linda, of Gordonsville, Va. The marriage took place in the Episcopal Church in Waco, Texas. The bridegroom was graduated from the University of Virginia in 1941. When the emergency arose Mr. Sheffield immediately enlisted and won his wings at Kelly field among the first twelve in his class. His record was so good and his ability to handle men so marked that he was immediately made an instructor in army aviation at Perrin Field, Sherman, Texas. Following a ten days' honeymoon, Lieut and Mrs. Sheffield will reside in Sherman, Texas. Like his father, Lieut. Sheffield is also a musician.

▸ Gene Barton has been appointed chairman of the convention committee for the Toilet Goods Manufacturers Assn. of Canada. Plans are well under way to make the annual affair at the Seigniory Club an outstanding one in attendance and otherwise.

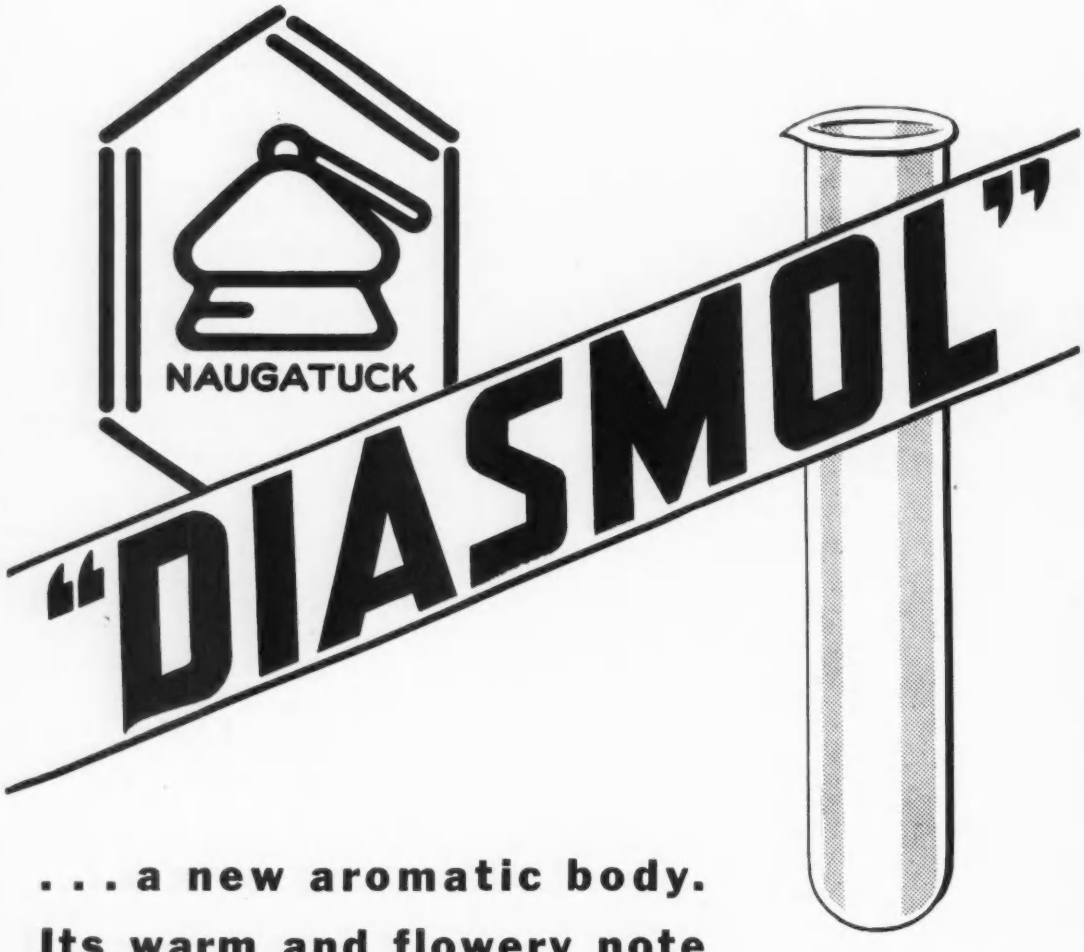
▸ C. P. McCormick, president of McCormick & Co., Baltimore, Md., has been drafted to serve on the Business Advisory Council of the Department of Commerce, Washington, D. C., of which R. R. Deupree, president of the Procter & Gamble Co., is chairman.

▸ Leslie R. Carvalho, formerly president of the Owens-Illinois Closure Service Corp. and former head of the Advanced Closures Corp. which he organized, has joined the Crown Cork Specialty Corp. which took over the latter company last December. He will make his headquarters in Decatur, Ill.

▸ Gust Carsch has joined Parfums de Dana, Inc., New York, N. Y., as perfumer and cosmetic chemist. He will also devote some of his time to research and development work for the S. Henry Co., an affiliated concern.

▸ Miss Mildred Elman Mennen, daughter of William G. Mennen, head of the Mennen Co., Newark, N. J., became the bride of Cyrus Stowe Hapgood of Lake Worth, Fla., March 28 at her father's home in East Orange, N. J. The bride's sister, Miss Irene Elizabeth Mennen, whose engagement to James H. Hunter of North Adams, Mass., was just announced, acted as maid of honor.

▸ Jill Jessee, promotion manager of Lentheric, Inc., is recuperating following an operation recently at the Hospital for Joint Diseases, New York, N. Y.



. . . a new aromatic body. Its warm and flowery note will give character to your compounds.

NAUGATUCK AROMATICS

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NEWS and EVENTS

Canada studies cutting cosmetic and drug "frills"

Studies are being made in Canada by the Wartime Prices and Trade Board on methods to simplify and standardize cosmetic and drug articles by cutting out "frills." The work is being done by committees from the trade appointed by the board and serving without remuneration. The principal object is to make price control operative.

On the cosmetics and toilet goods advisory committee are: J. H. Andrews, president, Lymans, Ltd.; Thomas Haughland, general manager, J. B. Williams Co.; J. G. Stenhouse, president, Bristol-Myers Co. of Canada; R. F. Merkley, manager, Northern Warren, Ltd.; and Andre Borel, manager, Parfumeries de Paris, Ltd.

Serving on the pharmaceutical committee are: W. A. S. Ayerst of Ayerst, McKenna & Harrison, Ltd.; J. S. Lang, Burroughs Wellcome & Co.; Eliot S. Frosst, Charles E. Frosst & Co.; and H. R. Horner, Frank W. Horner, Ltd. There is also a surgical dressings committee consisting of W. M. Campbell, vice-president, Johnson & Johnson, Ltd., and V. G. Wisby, manager, Smith & Nephew, Ltd.

On the advisory committee studying proprietary medicines are: L. G. Ryan, president, Wingate Chemical Co.; J. G. Stenhouse, president, Bristol-Myers Co. of Canada; and H. L. Davis, manager, Davis & Lawrence Co.

Kenneth Merkel heads committee to salvage needed waste materials

The War Production Board through Clarence H. Low, chairman of the New York City Salvage Committee, has appointed Kenneth W. Merkel, chairman of a committee to organize the essential oil and aromatic chemical industries to assist the WPB in salvaging such materials as paper, tin, rubber, rags, etc. In his own organization, George Lueders & Co., New York, N. Y., Mr. Merkel appointed one man in every department of the office and factory to be responsible for salvaging of materials. The salvaged materials are sold by each concern that collects them or else are given to charitable organizations which dispose of them to concerns that reclaim the needed materials. George Lueders & Co. will notify all essential oil houses of means to collect needed materials. At all times further information on the subject may be had from Mr. Merkel.

WPB studies new alloys for collapsible tubes

Tin-coated lead and tin-lead alloy are being considered by the Division of Industry Operations of the War Production Board, for use in collapsible metal tubes. Percentage of tin that would be permitted has not been determined, but the board announces it will be consistent with health standards. The division will require use of salvaged instead of pure tin and will seek to eliminate packing of non-essential items in tube containers.

Must be official, says WPB of priority explanations

In securing interpretations or explanations of priority orders, they must come from the correct official source, warns J. S. Knowlson, director of Industry Operations of WPB. Interpretations of orders or regulations are over the signature of the Director of Industry Operations, the General Counsel of WPB or his assistant for the Division of Industry Operations. An explanation of an order's application to a particular case may come from the branch or section chief or other official to whom the order was assigned. Interpretations or explanations from other sources are "not official."

How to be in business a year from today

"Will you be in business a year from today?" W. S. Bone of the Los Angeles Chamber of Commerce asked a recent meeting of the California Cosmetic Assn. in the Knickerbocker Hotel, Hollywood. His answer to the question was that a great deal depends on resourcefulness, ability and courage of each individual cosmetic manufacturer and that advertising is highly important today. W. J. Pringle of Lord & Thomas, advertising, spoke on trade names familiar today, which got their start during the first World War with consistent advertising. Others, then well known, he pointed out, lost because advertising was neglected. Chairman of the meeting was Mrs. Sally Hansen, president of the association.

Drug executives study help to retailer in war

How to assist the retail druggist secure merchandise and maintain his sales volume and profits during the war was analyzed at a two-day conference of McKesson & Robbins executives at the Jonathan Club, Los Angeles, Calif. Results of this study and discussion of the problem are described as hopeful. I. H. Bander, vice-president in charge of drug sundry sales, and James H. Parkes, executive vice-president for the Pacific Coast, were in charge of the conference. Participating were chief executive officers, sales managers, buyers and other officers of divisional headquarters and branches in California and Arizona.

Canada restricts essential oils

Export permits are now required for essential oils shipped from Canada, according to the Hon. J. A. MacKinnon, Minister of Trade and Commerce. Added to the previous list of products for which export permits are required are: eucalyptus, lemongrass, patchouli, sandalwood, cassia, peppermint, jasmin, bergamot, lavender, neroli and other essential oils not otherwise provided for in regulations.

Detroit association hears about capsules

Capsules was the subject of a talk illustrated with sound motion pictures given by John Belfield of Gelatin Products Co. at the March meeting of the Allied Drug and Cosmetic Association of Michigan. It was the first of three such motion picture talks.

Synthetic animal fixatives at their best

CIVET PASTE W

But for an addition of civet many a perfume would be lifeless and insipid. This well balanced substitute for the natural product is also valuable for its musk by-odor. It is readily soluble in benzyl benzoate, alcohol and other similar solvents.

ANIMALINE W

This compound crystalline aromatic possesses the valuable animal note of genuine musk. Contrary to other artificial musks, it possesses no unpleasant by-odor. It is easily soluble in benzyl benzoate and similar solvents, as well as alcohol, essential oils, and most aromatics.

MUSCARO W

The amazing faculty of musk of merging, intensifying and leveling off the ingredients of a perfume has been completely captured in our Muscaro W. Interesting results are obtained in combination with Musk Xylol, Musk Ambrette and Musk Ketone to which it imparts the Tonkin effect not present in these ordinary musk substitutes. Easily soluble.

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Cosmetic men in Army, Navy and Air Corps

This is our first "Roll of Honor"—men from cosmetic companies, gone from face powder to gun powder; hand lotions to death potions. It isn't an exclusive list of "important" men of the industry, this roll of 66 men from five companies. It's more than that. It's a list of "important" men in winning this all-out war. There are office boys from Coty and Charles of the Ritz, stock, order and supply clerks, packers, salesmen, a window-dresser, porter and a chauffeur. Their services cover a dozen branches of the armed forces of the Nation—Engineers, Artillery, Medical and Signal Corps, Armored Divisions, Air Corps, Coast Guard, Navy and Marines.

Allied Products Co.—William H. Brubaker, Robert Bunting, John Cameron, Jr., Edward A. Conklin, John Docherty, Marshall Eldridge, Clifford M. Johnson, Robert Kidd, Myron Melnick, John T. Neath, Robert S. Nugent, George V. Pelzer, James L. Schultz, Edward Van Brunt, Guy Werner, Robert L. Williams, Clifford Winton, James H. Shaw, Jr., George Ferris, Gardner P. Doden, Charles Hunter, Jr., John Lefler, and John L. Lates.

Charles of the Ritz—Elof Holmlund, Alex Ciardello, Joseph Horelick.

Vadsco Sales Co.—James McCarthy, William Schroeder, William McNeil, Philip Scuderi, James DiSalvia, Edward Walsh, Charles Gibson.

Lucien Lelong, Inc.—Frank Beekman, Thomas Casey, William Duffy, Tony Fratto, Richard Hartman, Boleslas Janiski, Charles Kelly, Peter Leopold, George Luck, William Rodgers, Bernard Spadafore, Arthur Willison, Robert Zelus.

Coty—Denny Keating, Jean R. Gayout, Edward Bokesh, Dean Caziarc, Rene LeGuern, Leroy Morris, Rosario DiPalermo, William Schubert, Thomas A. Hughes, Albert Nielsen, Edward Cox, William B. A. Rowe, Martin Lamb, Jeremiah Henchion, Milton Goldberg, Alan G. Bralower, Allan Inverne, William T. Thomsen, Raymond Perry, Frank E. Oakley.

Herb conference held at N. Y. Botanical Gardens

Representative speakers from the cosmetic and perfumery fields, addressed the Herb Conference held at the New York Botanical Gardens, April 7 and 8. The conference, which was semi-popular in its appeal, covered a wide range of herb uses including: "Herbs in Perfumery" described by Christian Wight, chemist of Van Ameringen-Haebler, Inc., and "Herbs in Cosmetics" by Mala Rubinstein of Helena Rubinstein, Inc. Other speakers included Dr. Ernest S. Guenther, chief chemist, Fritzsche Brothers, who provided the commentary on the company's motion picture film of essential oil production in the western hemisphere. M. L. Van Norden of the American Spice Trade Association spoke on "Spices—Past, Present and Future." Most of the talks were timed for not more than a half-hour.

C. A. Willard now chief of WPB cosmetic branch

C. A. Willard, formerly president of the Fruit Treating Corp., Orlando, Fla., has been appointed acting chief of the Toiletries and Cosmetic branch of WPB in place of Herbert T. Rosenfeld.

WPB planning severe cuts in cosmetic production

Severe restriction of varieties and shades of lipsticks, rouges, powders and cleansing creams, and elimination of hand lotions, toilet waters and luxury perfumes, may not be far distant, officials of the War Production Board predict.

America's $400,000,000-a-year cosmetic industry was allowed until April 15 to provide the WPB with specific information as to how such standardization and elimination might be accomplished, together with estimates as to the number of cosmetic plants that might be converted to war industries.

Under consideration also is standardization of cosmetic packaging to free war-needed metals. This part of the plan may eliminate sample sizes of cosmetics.

Officials of the WPB class lipsticks, rouge, face powder and cleansing cream as "essential" cosmetics. Perfumes, particularly the luxury types, hand lotions and toilet waters are classed as "luxury" or "non-essential" cosmetics. The latter face the most severe restriction and standardization, even possible elimination.

As many as 30 varieties and shades of face powders are on the market. Not more than half a dozen are necessary, these could be standardized, according to the WPB.

The use of enamel coatings for glass container tops is further limited by WPB Order M-116. Closures may still be coated with enamel when required to protect lithographed printing.

Northam Warren plant now used for war production

Northam Warren, president of Northam Warren Corp., Stamford, Conn., announces that his firm, manufacturers of Cutex manicure preparations, is devoting a large part of its plant and engineering services to the production of essential war materials. The facilities of the plant which was completed only two years ago were offered to the government last fall before the U. S. entered the war.

Production of war essentials is expected to reach capacity shortly, according to Mr. Warren, who stated that because the new program is both an expansion and conversion step it will not interfere with the continued production of manicure preparations.

Cosmetic advertising increases in California

More cosmetic advertising has been appearing in the Los Angeles area lately and not all by local manufacturers. Reason for the increase, given by one authority, is the huge market developed by the vast war industries. "People can't buy automobiles and tires and refrigerators and other things as freely as they did. This has released cash for cosmetics and allied products," he pointed out. "The advertisers are going after this money."

Pharmaceutical Council nominates new officers

Nominating committee of the New York Pharmaceutical Council has completed its slate of officers for the annual meeting and election, April 14, at the Hotel Pennsylvania, New York, N. Y. Nominations include:

For president, Marty H. Sasmor, Bronx; for first vice-president, Louis G. Gitlin, Washington Heights; second vice-president, Joseph J. Setaro, Astoria; third vice-president, I. Lefkowitz, Corona; secretary, Dr. Hugo H. Schaefer, dean of the Brooklyn College of Pharmacy; treasurer, Frederick C. A. Schaefer, Greenpoint; and sergeant-at-arms, Jack Feldman, Manhattan.

For the Board of Directors nominations are: Meyer Shapiro, Bronx County; Nicholas S. Gesoalde, Kings County; Robert R. Gerstner, New York County; L. Bancheri, Queens County; and Frank L. Grennie, Richmond County.

WPB definition of cork supplier

Amendment No. 1 to General Preference Order M-8-a defines a cork "supplier" as "any person in the United States who engages in the importation, sale, manufacture or processing of cork, or in the importation of manufactured cork in finished or semi-finished form." The amendment is intended to permit allocation of additional imports.

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TELEPHONE: MURRAY HILL 5-0250-1-2
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INC.
Aromatic Chemicals-Essential Oils

Spice and drug plants for 1943 in California

Because of rising prices, agricultural authorities of Los Angeles County, Calif., report wide interest in flavoring spices and drug plants for national defense gardens. Not much commercial production can be expected for this year, but there may be a fair crop in 1943. Some years ago, Monroe Kidder, a Los Angeles chemical engineer and authority on herbs and flowers used in perfume manufacture, tried to arouse interest in this area in propagation of such useful herbs but there was no interest at that time.

Grain for molasses in industrial alcohol

A saving of 550,000 tons of sugar is indicated by present plans for substituting grain for molasses as the base for making some industrial alcohol, according to William L. Batt, director of materials, WPB. Passage by Congress of the necessary legislation will remove barriers so that beverage distilleries may re-distill 140 proof alcohol into 190 proof.

Export price sets oil duty

Valuation for duty on essential oils in Canada will be accepted as based on the export selling prices, according to the Minister of National Revenue.

Chemists discuss vitamins at New York meeting

Vitamins were the subject of a March 27 meeting of the American Section, Society of Chemical Industry and American Institute of Chemical Engineers at the Chemists Club, New York. Speakers were Dr. Lela E. Booher of the Milwaukee Children's Hospital and formerly with the U. S. Department of Agriculture and George Merck, president, Merck & Co. Dr. Booher spoke on "Chemistry and Nutrition of the Vitamins" and Mr. Merck on "Synthetic Vitamins, A New American Industry."

Lauric acid oils restricted by WPB

Use of cocoanut, babassu, palm kernel and other oils with high lauric acid content has been restricted by Order M-60 issued by the Director of Industry Operations, WPB. Because of the high yield of glycerine in these oils, the order prohibits use which does not produce glycerine, or in which the amount of glycerine remaining exceeds 1.5 per cent on an anhydrous soap basis. For April and May, customary use is permitted up to 50 per cent of average monthly use in 1941. After June 1, the order is fully effective. Firms with an inventory of more than 30,000 pounds of high lauric acid oils or equivalent, when the order was effective, are ordered to set aside 25 per cent and hold, subject to direction of the Director of Industry Operations.

Drug and chemical club organized in Atlanta

Patterned on New York and Chicago drug and chemical groups, the Atlanta Drug and Chemical Club was recently organized to promote "fellowship, co-

Atlanta Drug & Chemical Club officers

operation and goodwill" among members of the industry. Membership is restricted to executives and representatives of drug and chemical firms and allied industries. Executives of such firms living outside the Atlanta area may join by non-resident memberships. Luncheon meetings are held the second Saturday of each month at the Atlanta Athletic Club. There will be special speakers and also numerous social functions during the year. At the recent organization meeting there were 30 charter members. Membership is expected to eventually reach at least 100.

Officers of the new club are: George R. Fellows of Fritzsche Brothers, president; Lewis W. Robinson, Merck & Co., vice president; R. D. Rainey, editor - manager, Southeastern Drug Journal, secretary; and A. W. Duke, Atlanta Economy Drug Co., treasurer. On the board of directors are: Fred L. Lewis, John B. Daniel, Inc., chairman; and J. W. Renshaw, Lamar & Rankin; Frank L. Smith, Bauer & Black; Irving Mettelmann, Pepsodent Co., and C. B. Dyar, Abbott Laboratories.

Priority forms have been revised

Changes, largely technical, including requests for additional information have been made in forms under the Production Requirements Plan. They are for use in filing applications for the second quarter of 1942. The revised form is PD-25A and it is available at WPB field offices or the Bureau of Priorities in Washington.

J. B. Williams Co. employes receive Easter bonus

A special check for approximately one-half week's pay for all employes of over three months and under six months; and a check for approximately one week's pay to all employes of six months or over was given April 1 by the J. B. Williams Co., Glastonbury, Conn. The extra bonus was much appreciated by the employes.

Twenty-year term for cosmetic fraud

Convicted of defrauding a Hollywood business man of more than $27,000 to finance the cosmetic "House of Blondell," Herman Dudley Abrams, calling himself "doctor," was sentenced in March to a term of two to 20 years in San Quentin. He represented that Hollywood motion picture stars were financing a new cosmetic firm called the "House of Blondell" which would manufacture and market a healing and beauty clay called "Volterra," which he claimed had been discovered by an old Indian on some property of his in the wilds of Montana. The clay, according to the fraudulent "Dr." Abrams, performed miracles, healed wounds overnight and left no scars. He even claimed two huge orders for shipment to Europe.

No "free" Defense Stamps Treasury official warns

Defense Stamps and Bonds may not be used in any way as part of a merchandise sale, according to an announcement of policy just made by Nevil Ford, State Administrator of the New York Defense Savings Staff of the Treasury Department. This regulation is to preclude any use of Defense savings as trading stamps, premiums or gifts contingent upon merchandise purchases.

Linit and two soaps win package awards

Certificates of honorable mention were awarded by the American Management Assn. to the Linit bath package of Corn Products Refining Co.; the Swan soap package of Lever Brothers Co. and the Ivory Snow package of Procter & Gamble Co. They were among ten packages given honorable mention in the annual contest from a field of almost 200 entries. These and other winners were at the Packaging Exposition in the Hotel Astor, New York, from April 14 to 17.

Synthetics gaining, Lloyd Speck tells Canadian joint meeting

Synthetics are increasingly replacing the usual run of essential vegetable oils used for flavorings in beverages and food products as well as in cosmetics and perfumes, said Lloyd W. Speck, of Fritzsche Brothers of Canada, Toronto, before a combined meeting of the Society of Chemical Industry, Food and Nutrition Division; Canadian Institute of Chemistry, and the Quebec Plastics and Rubber Group.

Mr. Speck pointed out how the varied list of essential or light oils came ordinarily from the four corners of the world, but with the world in a turmoil of war, preventing usual trading, synthetics had to be turned to in meeting the demand for these oils. He said the synthetics were being produced in quality measuring up to the stipulated requirements and were proving satisfactory.

Five reels of colored motion picture films were shown illustrating the gathering and extracting of essential oils, essences and spices in various parts of the world. Dr. R. S. Jane, chairman of the Montreal Section, Society of Chemical Industry, was in the chair.

Numerous other phases of the effect of the war on the industry were discussed informally both by the speakers and the members.

U. S. can grow camphor and eucalyptus trees

Unusual possibilities for utilizing eucalyptus industrially were described by Dr. Paul J. Kolachov, research director, Joseph E. Seagram & Sons at the eighth annual convention of the Chemurgic Conference, March 25 to 27, in Chicago. Dr. Kolachov pointed out that eucalyptus trees are cultivated in Florida and California, but are used only for their lumber in railroad ties. He pointed especially to use of eucalyptus for such important constituents as geraniol, citronellal, limonene, piperitone, cineol (Eucalyptol) and phellandrine. He stressed the use of these both in the pharmaceutical industry and also in perfumes and soaps. The yield of the trees is high, he said, about 50 lb. per acre during the first year of maturity.

A large portion of the United States shows possibilities for cultivation of camphor trees, Dr. Kolachov said, adding that it is a quick-growing tree, so that from an acre of them more than 600 pounds of camphor can be produced in a year. Regions of the country that seem to meet the climatic conditions necessary to camphor tree cultivation, he said, are everything east of the Mississippi, but no farther north than half of Missouri and all of Kentucky. But the whole Atlantic seaboard is suitable including Florida and also mid-portions of California, Oregon and Washington.

Canadians ration glass containers

Allocations of glass containers are being made to the Canadian cosmetic industry, based on quantities used in 1942. Opalware for creams will be obtained at 95 per cent of dollar expenditures by the user in 1941. Ordinary glass bottles are at 90 per per cent of 1941 expenditures. Blue glass will be allocated to the full extent of purchases made from April 1, 1941 to April 1, 1942. In cases where allocations are at 90 per cent, quantities may later be increased to 95 per cent. The Glass Administrator has asked the Toilet Goods Manufacturers Assn. for suggestions to avoid undesirable regulation.

OPM ups price for titanium dioxide

A temporary price increase of one and one-half cents a pound has been granted by the Office of Price Administration to the American Zirconium Corporation, Baltimore, manufacturer of titanium dioxide from ilmenite. The permission, effective only until May 2, permits the company to buy a supply of ilmenite ore from India at a higher than usual price—$31.50 a ton—and charge the extra cost on its products until a domestic supply, now being developed, is available.

Noted Fritzsche expert studies West Indian essential oil projects

The Department of Agriculture's Experimental Station in Porto Rico is one of the most beautifully situated stations of its kind in all the world, according to Dr. Ernest Guenther, who has recently come from there and speaks with the authority of one who has covered the major government-sponsored and cooperative agricultural enterprises throughout the Eastern and Western Hemispheres. It is a very efficient organization and is under the able direction of Atherton Lee, who has just been called to Washington to take over the additional duties of Assistant Director of the Agricultural Division, Co-orinator of Inter-American Affairs. Its staff includes botanists, soil control experts, agriculturalists and other specialists. Their experimental work on the growing of essential oil producing plants assumes increasing importance as the likelihood of re-establishing normal sources of supply outside of the Western Hemisphere becomes more and more remote.

After his visit with Mr. Lee, Dr. Guenther left by boat for Ciudad Trujillo, Dominican Republic, a city founded by Columbus in 1494. The oldest white settlement in the Americas, Ciudad Trujillo is called the "Cradle of American History." There, Dr. Guenther met the charming and very cultured philanthropist, Leon Falk, who is devoting his energies to the work of Jewish Resettlement and is president of the project now functioning in Santo Domingo. Several hundred refugees from Central Europe have settled at a beautiful haven on the northern coast of the Island and there, organized according to cooperative principles, they are conducting what may prove to be important studies in the production of essential oils.

Lemongrass offers the best chance of early production on a commercial scale as there is ample plant material for increasing the present acreage.

Following his visit to the refugee settlement, Dr. Guenther drove to Cap Haitien, Haitian Republic, and called upon the new Société Haitiano-Americaine de Développement Agricole, an organization formed by the Export and Import Bank for the purpose of growing rubber on a large scale. Since, however, actual production of rubber from this source is seven to eight years off, the Société is interested, meanwhile, in other crops including those of aromatic plants. Because of sufficient available plant material, the prospects for lemongrass production here, too, are good. Not so favorable, however, is the outlook for early commercial production of citronella, patchouly, geranium and other likely crops as plant material for these is not available in sufficient quantity. In general, though, low priced labor and a great variety soil, altitude and atmospheric conditions make the future possibilities for Haitian essential oil production very attractive.

Dr. Guenther flew from Haiti to Cuba and then to Clewiston, Florida. Sugar being Cuba's chief interest at the moment, there is little to be expected from this region in the matter of producing essential oils. The U. S. Sugar Corp. of Clewiston, Fla., is actually in production on lemongrass oil.

Of the areas visited, Dr. Guenther regards the Dominican Republic and especially Haiti as the most promising for essential oils, but aside from petitgrain which has been produced in Haiti for some years, production of other oils is still in its infancy and immediate relief for the American essential oil industry from this source should not be expected.

TECHNICAL ABSTRACT SECTION

APRIL 1942

Compiled by Maison G. deNavarre, Technical Editor of The American Perfumer * * *

The brief abstracts listed in this section provide you with a convenient key to the current scientific literature of the world on perfumes, cosmetics, toilet preparations, soaps, etc.

A—Analysis
B—Perfumes
C—Essential Oils
D—Cosmetics General
E—Deodorants
F—Depilatories
G—Creams General
H—Emulsion
I—Face and Other Powders
J—Make-up
K—Shampoo
L—Soaps
M—Dental Preparations
N—Antiseptics
O—Hair Preparations
P—Sun Tan Preparations
Q—Miscellaneous
R—Oils and Fats
S—Shaving Preparations
T—Skin Absorption
U—Dermatitis
V—Manicure Preparations
W—Wetting and Foaming Agents
X—Permanent Waving Preparations
Y—Flavors
Z—Organic Chemistry

THE AMERICAN PERFUMER

A Analysis

Analysis of Carbonates of Ammonium, G. N. Evetskii, *Zavodskaya Lab.*, **10**, *149-51, 1941.* Mix 5 ml. of sample with a mixture of 35-40 ml. of 0.1 sodium hydroxide, 5-7 ml. of 40 per cent neutral formalin, and 15-25 ml. of saturated barium chloride solution. Shake and carefully titrate with N hydrochloric acid with phenolphthalein as indicator. (Through *C.A.* **35.**)

A Simple Method for the Separation of Cholesterol and Lanosterol (From Lanolin), Tunetaro Matumoto, *Tokyohuritu Kogyo-syoreikwan Kwagaku Kenkyu Hokoku (Repts. Chem. Research, Prefectural Inst. Advancement Ind., Tokyo) No. 3, 38-46, 1940.* Lanolin was heated with a mixture of alcohol, potassium hydroxide and benzol, and the crude unsaponifiable fraction obtained from the benzol layer was dissolved in less than 3 volumes of warm methanol. From this solution at 45°, crude lanosterol (I), containing little cholesterol, crystallized out and from the mother-liquor kept at 30-5°, an oily fraction (II) was obtained. The liquid separated from II gave solid crystals (III) and mother-liquor (IV) at 10°. To one-third of IV plus II, methanol was added and the mixture allowed to stand at 35°, then a solid fraction, crude lanosterol (V), was obtained. The filtrate of V was separated into crystals (VI) and liquor (VII) at 23°. From the solution of III plus VII in alcohol at 30° crude cholesterol (VIII) was separated, and to the filtrate was added alcohol at 28°; crude cholesterol (IX) crystallized. Methanol was added to the filtrate of IX and crude lanosterol (X) crystallized at 33°. From the alcohol solution of two-thirds of IV plus mother-liquor of X (crystals obtained at 10° were taken away), the last crystals of crude cholesterol (XI) were obtained. Crude cholesterol VIII plus IX plus XI was purified easily by recrystallization from 95 per cent alcohol. Crude lanosterol was recrystallized with methanol plus benzol (5:3); m.p. 136-7°. (Through *C.A.* **35.**)

Determination of Formaldehyde in the Presence of Acetaldehyde, A. Castiglioni, *Z. anal. Chem.*, **119**, *287-90, 1940.* The reaction between formaldehyde and ammonium salt whereby hexamethylenetetramine and an equivalent quantity of acid are formed has been used in the past for determining formaldehyde. Under the same conditions, acetic acid reacts much more slowly so that it is possible to carry out the procedure in the presence of acetic acid provided certain precautions are taken. To the solution to be analyzed, add an excess of 5 per cent ammonium sulfate solution, shake and allow to stand exactly 15 minutes. Then add 2 to 3 drops of a solution of rosolic acid in ethyl alcohol and sufficient 0.5 N sodium hydroxide to give a distinctly basic reaction. Titrate the excess base with 0.5 N hydrochloric acid; 3 mol. formaldehyde = 1 mol. sulfuric acid. (Through *C.A.* **35.**)

Determination of Tin in Dross (Tin Waste), H. Gerschbacher, *Osterr. Chem.-Ztg.*, **43**, *61-2, 1940.* Take a sample of 250 g. and sift as much as possible through a sieve with meshes about 2 mm. apart. Powder the finer part and take for the analysis a 20 g. sample with proportionate parts of the fine and coarse material. Fuse 75 g. of potassium cyanide in a porcelain crucible, the sides of which are about 7 cm. high and the upper diameter is about 6 cm. Into the molten cyanide gradually introduce the sample. Add the coarse particles first. After each addition take the crucible up in tongs and strike it a few times with asbestos paper so that the molten tin will collect together in a button. It is well to add about 3.7 g. of powdered charcoal to aid in the reduction of oxides. When foaming ceases and all the sample has been introduced, allow the content of the crucible to cool and place it in a beaker containing water. Wash the residual tin as in panning gold ore, finally collect all the pieces of tin and melt to a single button under potassium cyanide. Dry and weigh. To determine the precise tin content, dissolve the metal in hydrochloric acid under reflux condensation with the condenser joined to the flask by ground glass. To dissolve the last particles of metal, add a little potassium chlorate. Evaporate off all chlorine and remove antimony by introducing a little iron powder. Cool, dilute to a definite volume and filter through a dry filter. Under an atmosphere of carbon dioxide, reduce with 1 g. of aluminum. Heat to dissolve all precipitated tin, cool and titrate with standard iodine solution to a starch end point. (Through *C.A.* **34.**)

New Simple Method for Determining Glycerol, Hogai Ka, *Rept. Inst. Sci. Research Manchoukuo*, **4**, *141-61, Abstracts (in English) 29-30, 1940.* Denigés showed that glycerol + an oxidizer + codeine give a blue color suitable for the detection and determination of glycerol. *Ka* tested the applicability of the test and the best conditions for producing a maximum blue color and compared the results obtained colorimetrically with those obtained by other well-known procedures. The time required for oxidation of the glycerol with bromine was studied; the intensity of the color increased with the time allowed for the blue color to develop but became nearly constant after 25 minutes. It did not seem to matter how quickly the excess bromine was expelled. After the addition of codeine and sulfuric acid, the blue color also increased with the length of time the mixture was heated but reached a constant in about 25 minutes after the addition of codeine and 20 minutes after the addition of sulfuric acid. The quantity of bromine water used had no particular influence if an excess was present. By means of the Lovibond tintometer the content of glycerol can be calculated by the formula: % glycerol = 0.0465 (blue value—1.575). The quantities of impurities in the glycerol of fats and oils are so small that the glycerol content can be determined directly after saponification and decomposition with dilute sulfuric acid. The results in determining small quantities of glycerol were about the same as by the acetin method but a little lower than those obtained by the dichromate method. The method is undoubtedly applicable to the determination of glycerol in soy or wine after the elimination of impurities by addition of calcium oxide. (Through *C.A.* **34.**)

Polarographic Analysis, R. P. Obrecht, *Mines Mag. (Col. School of Mines)*, **30**, *643-4, 660, 1940.* A discussion of the advantages of the method, procedure and apparatus, polarograms, preparation of inor-

ganic cation and of organic solutions, analytical uses and applications of the polarographic methods to metallurgical, chemical, dyestuff, petroleum and pharmaceutical industries. (Through *C.A.* **35.**)

Preservation of Sodium Thiosulfate Solutions, Fred J. Kirkish, *Chemist Analyst*, **29**, *No. 3, 68, 1940.* A marked improvement in the stability of standard thiosulfate solutions may be obtained by the addition of 1 cc. of chloroform (0.1 per cent) per liter of this solution. The chloroform loses strength rapidly after about eight months.

Rapid Acetylation Method, R. E. Regilyant, *Framatsiya*, **1940**, *No. 5, 9-12.* By using phosphoric acid (10 per cent solution in acetic anhydride) as catalyst in acetylating essential oils with acetic anhydride, esterification can be effected in 15 minutes. This method agrees well with Schimmel's when used to determine the acetyl number of essential oils. Experiments with castor oil showed it to be applicable also to determine acetyl number of fatty oils. The accelerated method has been applied to determination of acetyl number in coriander, marjoram, sweet flag, mint and yarrow oils. (Through *C.A.* **34.**)

Rapid Determination of Phenol in Soap, S. N. Semenov and M. Zaliopo, *Masloboino Zhirovoe Delo*, **16**, *No. 3, 20-1, 1940.* In the modification of the gravimetric determination of phenol in soap by precipitation as tribromophenol, results accurate to 0.1 per cent can be obtained in one and one-half to two hours by iodometric method of back titration of the excess bromine reagent. Shake 1 gram of shredded soap in 50 ml. of hot water (60-70°) until dissolved, precipitate with 10 ml. of 10 per cent calcium chloride, filter and wash the calcium soap with 25-50 ml. of cold water. Treat the filtrate with the bromate-bromide reagent (2.7837 g. potassium bromate and 10 g. potassium bromide in 1 l. water) and 5 ml. of concentrated hydrochloric acid. Shake and allow to stand for 15 minutes. Introduce 2 grams of solid potassium iodide, shake until dissolved, let stand 5 minutes and titrate with 0.1 N/Sodium thiosulfate to a straw-yellow, add some starch solution and continue the titration to a distinct blue. Make a blank test and calculate the phenol. (Through *C.A.* **35.**)

Rapid Volumetric Test for Anhydrous Soap, Wm. J. Govan, Jr., *Oil & Soap*, **17**, *262-3, 1940.* A pyrex Babcock bottle graduated to 4 ml. in tenths, calibrated at 100°C to contain ml. at 4°C, is used. A sample is weighed into the tared bottle to which hydrochloric acid is added and the whole placed in a water bath. When the fatty acids are clarified, glycerine is added until the fatty acids are brought into the graduated neck. The bottle is centrifuged and the observed volume is multiplied by correction factor, giving the weight of anhydrous soap.

Titan Yellow Qualitative Test for Magnesium, Edna Bishop Otto and Carl E. Otto, *Industrial & Engineering Chemistry, Analytical Edition*, **13**, *No. 1, 65, 1941.* The titan yellow tests for magnesium is discussed at length, reviewing the effect of other ions. While it is not specific for magnesium, it is suitable and efficient when properly applied. Methods of removing interfering ions are suggested.

TSPP Determination. Many laboratories report satisfactory results for the determination of tetrasodium phyrophosphate in soap, by the following method: Prepare an aqueous solution of the alcohol-insoluble ingredients of the soap sample and adjust the pH to 3.8 by adding glacial acetic acid, preferably by means of a glass electrode. Add a solution of zinc sulfate and titrate the sulfuric acid liberated with standard alkali. (Through *Soap* **17**, *No. 8.*)

Use of Indicators for Showing the End Point of the Swift Fat Stability Test on Lards, Robert Hubata, *Oil & Soap*, **18**, *No. 2, 37, 1941.* (See item under Section L.)

Use of Thorium Nitrate to Distinguish Between Pectin and Certain Gums, E. F. Bryant, *Industrial & Engineering Chemistry, Analytical Edition*, **13**, *No. 2, 103, 1941.* Pectin is one of the most difficult water-soluble gums to identify. The method of separating it from other gums is given along with tests for identity for gum arabic, Irish moss, agar, karaya, quinceseed, starch, methyl cellulose, tragacanth with thorium nitrate, and neutral lead acetate solutions.

B Perfumes

Aldehyde Soap Perfumes, T. Ruemele, *Seifens.-Ztg.*, **68**, *163-4, 1941.* The higher aldehydes can be used in soap perfume if combined with the proper fixatives. Octyl aldehyde has an odor similar to that of lemons or oranges. To fix this odorant, oil of rue and methyl nonyl ketone are suitable. They are similar to octyl aldehyde and need to be used in small amounts only. Nonyl aldehyde gives more of a flower-like odor, suitable in rose compositions. The fixative to be used can be chosen to accentuate some one desired effect. In rose compositions geranium oil, storax, cinnamic alcohol, and phenyl acetaldehyde dimethyl acetal are used. Methyl naphthyl ketone, cananga oil or terpeneless petitgrain oil give a neroli effect. (Through *Soap* **17**, *No. 8.*)

Cultivation of Pink Geranium and Production of Geranium Oil in the Soviet Union, V. E. Vorontsov, *Bull. Applied Botany, Genetics Plant Breeding (U.S.S.R.), Suppl.*, **77**, *7-124, 1936.* (See item under Section C.)

Distribution of the Double Linkings in Irone, A. E. Gillam and T. F. West, *Nature*, **148**, *114, 1941.* A specimen of irone (I) was prepared from oil of orris. I had the appropriate constants and yielded the characteristic p-bromophenyl-hydrazone. Its absorption spectrum exhibited an intense band at 2280 A. ($\log e = 4.08$) and an inflection near 3080 A. ($\log e = 2.03$), the two together being characteristic of an a, B-unsaturated ketone. The location of the intense band indicates the presence of a monosubstituted a, B-unsaturated ketone (probably RCH=CH—C(R)=O and clearly shows the C=C—C=C—C=O structure to be absent. This inference is supported by the fact that the absorption spectrom of a-ionone (λmax. 2285 A.)) is almost identical with that of I (λmax. 2280 A.). (Through *C.A.* **35.**)

Octyl Alcohol and Some Derivatives, J. G. F. Druce, *Mfg. Perfumer*, **11**, *299, 1940.* A review of the various derivatives of octyl alcohol and

its isomers which may be of interest in perfumery and flavors, together with a short discussion of the physical properties of the principal esters.

Perfume from the Seed, Oil of Litsea Cubeba Persoon, *Japanese Pat. No. 129,819.* The oil is condensed with acetone or methyl ethyl ketone, with an alkaline compound as condensation agent, and the products are separated into volatile and nonvolatile portions; the volatile oil is cyclicized by treatment with organic or inorganic acid.

Perfume, *U. S. Pat. No. 2,256,722.* To effect defleurage of a naphthenic mineral oil containing ethereal oils, the oil is treated with 80-90 per cent alcohol.

Use of Hydroxycitronellol as a Perfume Fixative, *U. S. Pat. No. 2,258,132.* Hydroxycitronellol is used with various perfumes, for soaps, cosmetics, etc.

C Essential Oils

American Vetivert, H. A. Levey, *Drug & Cosm. Ind.*, **47**, *No. 5, 534, 1940.* A brief discussion of the vetivert industry in Louisiana. The plants yield from 1 to 1½ per cent of essential oil as compared to 1½ to 2 per cent of Java roots produced in Dutch East Indies. Methods of extraction by distillation and volatile solvents are discussed.

Cultivation of Pink Geranium and Production of Geranium Oil in the Soviet Union, V. E. Vorontsov, *Bull. Applied Botany, Genetics Plant Breeding (U.S.S.R.), Suppl.*, **77**, *7-124, 1936.* Field experiments showed that pink geranium, *Pelargonium roseum*, Willd., can be successfully cultivated in the Caucasus as an annual plant. It is a hybrid form closely related to *P. graveolens* and *P. radula*, containing 0.1 to 1.25 per cent geranium oil. The oil compares favorably with the best foreign products and contains considerable l-citronellol. The physical and chemical properties of oil obtained from various plantations are given, and its use in the perfume and cosmetic industries and as a source for the production of synthetic products (rhodinol) are discussed. The distribution of *Pelargonium* genus and the cultivation of its numerous varieties throughout the world, the methods of extraction of geranium oil and its properties in relation to the geographic origin and climatic conditions, the commercial practice of adulteration and numerous other features of the oil industry are discussed at great length. Extensive bibliography. (Through *C.A.* **34.**)

Peppermint Oil, Menthol Content of, A. Agren and E. Bengtsson, *Farm. Revy*, **40**, *157, 173, 1941.* The method of Swedish Phar. X for determination of menthol content of peppermint oil was studied. This is the classic method for determining alcohols in ethereal oils by acetylation with acetic anhydride and anhydrous sodium acetate, separation, washing and quantitative saponification with alcoholic potash. The variation of saponification rate (with temperature) of acetylated peppermint oil, menthyl acetate, terpenyl acetate and of two acetylated synthetic oil mixtures of menthol, terpineol and xylol was studied. Comparing the Swedish Phar. method with that of the French Phar. 1937 (Delaby and Sabetay's method of acetylation in pyridine solution), it was found that the method of the Swedish Phar. did not determine only menthol but determined terpineol quantitatively as so much menthol, while the pyridine acetylation method gave the true menthol content. It was found that peppermint oils bought on the Swedish market in 1939 contained terpineol and that their true menthol content was below pharmacopoeial requirement. Hence the French Phar. method of analysis is recommended, together with a determination of the ester menthol content. (Through *J. A.Ph.A.* **31.**)

Perfume from the Seed, Oil of Litsea Cubeba Persoon, *Japanese Pat. No. 129,819.* (See item under Section B.)

Rapid Acetylation Method, R. E. Regilyant, *Framatsiya, 1940, No. 5, 9-12.* (See item under Section A.)

Synthetic Balsam, *Belgian Pat. No. 433,404.* Borophenates are condensed in the presence of formaldehyde or other aldehydes. The reaction is activated by sodium benzoate or cinnamate. The product is suitable for optical purposes, safety glasses, etc. (Through *C.A.* **34.**)

Systematic Hydrogenation of a Natural Essence, Shiu or Kusabura Essence, Leon Palfray, *Compt. rend.*, **211**, *101-4, 1940.* At 35°, 60° and 130° the relative rates of hydrogenation of Shiu essence in the presence of Raney Nickel under 100 atmospheres are 1.0:1.33:13.3. The densities d_4^{15} of the essence and of the products obtained by hydrogenation at 22°, 39°, 65°, 145° and 240° are: 0.8746, 0.8745, 0.8664, 0.8635, 0.8465 and 0.7498; other constants for the original, 145° and 240 products are n_D^{20} 1.4620, 1.4352, 1.4145; a^{20}-11°$_D^{20}$, 0, 0; n/o. 1.0, 1.69, 0.60; I number 321, 0.10, 0.02; acid numbers 1.10, 1.10; ester numbers before and after formulation, 0 and 265, 269, 14; alcohol content as linalool, 84, 86, 4.2 per cent; ketone as camphor 12, 0, 0 per cent; odor, typical, mentholic, paraffinic. In the 145° product the dimethyl octanol and the borneol can easily be separated by distillation. (Through *C.A.* **36.**)

Terpeneless and Sesquiterpeneless Essential Oils, Their Characteristics, Advantages and Mode of Employment, W. R. Littlejohn, *Flavours*, **3**, *No. 4, 7-18, 1940.* (See item under Section Y.)

D Cosmetics General

Acacia Laeta Gum from Nigeria, Anon., *Bull. Imp. Inst.*, **38**, *297-9, 1940.* (See item under Section Q.)

Almond Meal, Hans Schwarz, *Seifensieder-Ztg.*, **67**, *416, 1940.* The press cake from which sweet almond oil has been removed may be ground and used as a cleansing agent for sensitive skin. The meal from horse chestnuts is recommended for oily skin. Abrasive materials may be included in these compositions but soap and alkalis should be omitted.

Ball Wear in Ball Mills, Sture Mortsell, *Jernkontorets Ann.*, **124**, *1-38, 1940.* The decrease in diameter of the balls is proportional to the grinding time and is independent of the size of the balls. The experiments

were conducted on cubes of varying sizes, distributed with the regular balls during full-scale grinding operations. Another method was to use three unequal sizes of balls in a laboratory mill and to measure the weight decrease of each size with time. Results are expressed as a wear coefficient defined as mm. decrease in diameters per 1000 hours. By comparison of the values of this coefficient, the quality of varying steel compounds may be determined as used in the balls. It is shown by mathematical analysis that the wear is relatively less on the balls in a conical mill. The author critically discusses other experimental data and concludes that the results are explained as well by his hypothesis as by the hypothesis of Davis, that the wear is proportional to the weight of the ball. (Through *C.A.* **34.**)

Citrus Pectates, Properties, Manufacture and Uses, *Industrial & Engineering Chemistry*, **33**, *287, 1941.* Pectates result from the saponification of pectins. Treatment of commercial pectin with an alkali will form a type of pectate that has been known since 1790. Treatment of protopectin under proper conditions gives a different type of pectate, characterized by more viscosity in aqueous solutions and an alcohol precipitate which is stringy and fibrous rather than amorphous as in the case of ordinary types of pectate. The viscous type may be irreversibly transformed into the less viscous or ordinary type by acid treatment. Chemical relation of the two types is discussed. Both types of pectates form gelatinous salts with alkaline earth or heavy metals. Sodium pectate is a typical hydrophilic colloid which forms gels at low concentrations, hence very cheaply. Certain heavy metal pectates are water repellent and this property suggests a preparation of nonhygroscopic fillers for plastics. Other uses are discussed.

Cosmetic Manual, Bath Salts, J. Kalish, *Drug & Cosm. Ind.*, **47**, *No. 6, 644, 1940.* (See item under Section Q.)

Cosmetics Containing Emulsified Egg-Yolk Oil, *Japanese Pat. No. 129,-144.* Egg yolk is separated from the white, and coagulated with ethyl alcohol. The ethyl alcohol is removed and the oil is obtained by pressing. The oil is emulsified with an aqueous bentonite suspension and the Na salt of sulfonated cetyl alcohol. (Through *C.A.* **34.**)

Esters of Nitroalcohols, J. B. Tindall, *Industrial & Engineering Chemistry*, **33**, *65, 1941.* The propionic, butyric, and isobutyric esters of all of the monohydroxy nitroalcohols which can be formed by the condensation of nitromethane, nitroethane, 1-nitropropane, 2-nitropropane, 1-nitrobutane, and 2-nitrobutane with formaldehyde, acetaldehyde, propionaldehyde, butyraldehyde and isobutyraldehyde have been made, and certain of their properties determined. The esters are all colorless mobile liquids boiling with slight decomposition between 210° and 275° C. at atmospheric pressure.

Toilet Creams, *British Pat. No. 509,295.* A cleansing cream consists of lard, dairy cream, peroxide and a perfume mixed in the proportions: lard 16, cream 24 oz. concentrated, otto of roses 24 and hydrogen peroxide (20 vol.) 120 minims. A cold cream consists of lard 16, cream 12, turtle oil 1 oz., otto of roses 24 and hydrogen peroxide (20 vol.) 60 minims. A vanishing cream contains lard 8, refined starch 10 oz., otto of roses 16, almond oil 120 and essence of cochineal 3 minims. (Through *C.A.* **34.**)

Use of Thorium Nitrate to Distinguish Between Pectin and Certain Gums, E. F. Bryant, *Industrial & Engineering Chemistry, Analytical Edition*, **13**, *No. 2, 103, 1941.* (See item under Section A.)

E Deodorants

Antiperspirant, R. S. Weiss and M. D. Marcus, *Arch. Dermatol. & Syphilol.*, **43**, *539, 1941.* After testing a variety of aluminum salts, the workers find aluminum phenolsulfonate effective and safe. Fifty people were patch tested with a solution of aluminum phenolsulfonate and aluminum chloride, as well as several proprietary antiperspirants. The results of these findings are given. A 20 per cent solution of the phenolsulfonate was made up into a greaseless cream and also found safe. The authors used a 50 per cent alcohol solution of the sulfonate perfumed with clove and rose. Another formula contained 20 per cent of the aluminum salt, N.F. perfumed spirit 50 per cent further perfumed with ethyl acetate and lavender oil. The aluminum phenolsulfonate is also known as the sulfocarbolate. (Through *Drug & Cosm. Ind.*)

Burrow's Solution, *Lead Free, Preparation of,* Anon. *Drug Trade News*, **17**, *No. 5, 40, 1942.* The National Formulary VII will give the following formula: Aluminum sulfate 160 grams, acetic acid 160 cc, precipitate calcium carbonate 70 grams and water to make 1000 cc. A procedure for making the solution is included. The resulting product is a solution of aluminum subacetate.

Perspiration, M. A. Lesser, *Drug & Cosm. Ind.*, **47**, *No. 4, 393, 1940.* A review discussing the causes, sources, function and control of perspiration. A patented formula for increasing perspiration consists of mineral oil 45 to 70, petrolatum 13 to 75, waxes 20 to 35. Twenty-four references are included.

F Depilatories

Depilatory, *Brit. Pat. No. 521,240;* through *J. Soc. Chem. Ind.*, **59**, *574, 1940.* A depilatory in paste or emulsion form consists of a thiol having a substituted group attached to the same carbon to which the thiol group is attached, e.g., 2-amino ethyl mercaptan or ethyl mercaptan-2-sulfonic acid, and made alkaline with strontium hydroxide. (Through *J. Am. Pharm. Assn.* **30.**)

Depilatory, Stabilized Soluble Stannite, *Brit. Pat. No. 516,812;* through *J. Soc. Chem. Ind.*, **59**, *646, 1940.* Aqueous stannous chloride is poured into aqueous sodium hydroxide containing sodium silicate to give a solution having pH less than 12.6 (12.3). (Through *J. Am. Pharm. Assn.* **30.**)

Depilatory, *Swiss Pat. No. 209,-241.* A mixture of African beeswax, a plant resin, rose oil, chamomile oil and lilac oil, colored with chlorophyll or aniline dyestuff, are included.

Unhairing Process, *Canadian Pat.*

No. 396,324. Guanidine sulfide in combination with alkaline hydrolyzing agents is applied to hides and skins for dehairing them.

G Creams General

Derivatives from Hydrogenated Castor Oil, I, *12-Hydroxystearic Acid and Its Alkyl Esters*, Saul A. Bell and Abraham Taub. Methods have been given for the isolation of 12-hydroxystearic acid from commercial hydrogenated castor oil, and for the syntheses of a series of twelve of its esters with normal primary alcohols. A number of their physical properties have been evaluated and some of their applications to ointments and similar bases have been suggested. The results indicate the possibilities of utilizing these esters in the formulation of waxes having reproducible properties and whose qualities should prove superior to the natural waxes in respect to stability and freedom from color, odor and rancidity. (Through *J. A.Ph.A.* **31.**)

Purified Wool Grease, *U. S. Pat. No. 2,271,621.* An aqueous solution of an abietate is mixed with crude uncleaned wool grease. The water phase is separated, together with the impurities.

Stabilizing Plastic Emulsions Such As Margarine and Cosmetic Creams, *U. S. Pat. No. 2,223,558.* As a stabilizing agent with oleaginous and aqueous materials, use is made of an aliphatic polyhydroxy substance incompletely esterified with a higher molecular weight polymerized or oxidized aliphatic acid such as the mono- and di-esters of glycerol formed by reaction of glycerol with polymerized soybean oil. Various examples with details are given.

H Emulsions

Emulsification, Technique of, Walter Meyer, *Wien. Pharm. Wochschr.*, **72,** *312-317, 1939.* A discussion with six references. (Through *J.A.Ph.A.* **29.**)

Emulsifying Agent, *Japanese Pat. No. 129,439.* A mixture of Turkey-red oil and ammonium phosphate is used as emulsifying agent for hydrocarbons, chlorinated hydrocarbons, esters, ketones or terpenes.

Emulsions for Cosmetic and Other Purposes, *U. S. Pat. No. 2,259,466.* Aqueous emulsions of various oleaginous materials, etc., are prepared with use of a small proportion of the acetic acid amide of the monostearic acid ester of diethanolamine or various amides of a secondary aliphatic hydroxylamine, corresponding to the general formula $RCON\ M(OH)_y\ D(OR')_x$ where RCO—is an aliphatic acyl radical containing not more than 5 carbon atoms, D and M are organic radicals containing at least 2 carbon atoms, R′ is an organic lipophile radical containing at least 8 carbon atoms, and x and y are small whole numbers. (Through *C.A.* **36.**)

Emulsions, Stabilization of, A. King and G. W. Wrzeszinski, *J. Chem. Soc., 1513-1521, 1940.* The influence of electrolytes on the electrokinetic potential of stabilized oil-in-water emulsions has been studied. No relation has been observed between electrical charge and emulsion stability in the absence of chemical reactions. The role of lyotropic phenomena has been investigated, with special reference to concentrated emulsions, and the results have been discussed and explained. The relation of other fundamental properties of emulsions to stability has been considered, and some general principles have been developed for a rational explanation of the behavior of certain groups of emulsions. (Through *J. Am. Pharm. Assn.* **30.**)

I Face and Other Powders

Ball Wear in Ball Mills, Sture Mortsell, *Jernkontorets Ann.*, **124,** *1-38, 1940.* (See item under Section D.)

Cosmetic Powders, *Brit. Pat. No. 519,544.* Cosmetic powders are made by dissolving natural silk fibers or threads in a solvent consisting of a solution or suspension of a hydroxide of a heavy metal in an aqueous alkaline medium to form a concentrated solution, clarifying the solution, mixing the clarified solution with an acidic precipitating agent which is composed of a solution of an acid substance capable of forming with the heavy metal ion a derivative soluble in the precipitating medium, separating and drying the precipitated material.

Face Powder, *U. S. Pat. No. 2,218,586.* Talcum powder is treated with the fatty acid salts, such as zinc stearate or aluminum salts of a fatty acid containing at least 10 carbon atoms.

Face Powders, *U. S. Pat. No. 2,257,106.* A combination of salicylic acid and oil of bergamot is used with a higher fatty acid ester of a lower aliphatic monohydric alcohol, such as ethyl oleate or butyl palmitate, in alcoholic solution.

J Make-Up

Ball Wear in Ball Mills, Sture Mortsell, *Jernkontorets Ann.*, **124,** *1-38, 1940.* (See item under Section D.)

Indelible Dyestuff, *Canadian Pat. No. 397,451.* A non-toxic dyestuff consisting of a dihydroxy-dicarboxy-flouran in which a hydroxyl and a carboxyl group each is attached to the benzene rings that are bridged by an oxygen link.

K Shampoo

Method of Inhibiting the Clouding of Liquid Soap During Storage in Glass Containers, *U. S. Pat. No. 2,255,629.* The method of inhibiting the clouding during storage in glass containers of liquid soaps of the class consisting of liquid potassium soaps and liquid sodium soaps of liquid higher fatty acids, which comprises separating any insoluble calcium and magnesium compounds from the soap solution, and thereafter adding to the clear solution about 1-2 per cent of a water soluble alkali metal hexametaphosphate based on the total soap content of the solution, is described.

Preventing Clouding of Liquid Soap, *U. S. Pat. No. 2,255,629.* After removal of the insoluble calcium and magnesium soaps, 1 or 2 per cent of sodium hexametaphosphate based on the anhydrous soap content is added.

Shampoo, *U. S. Pat. No. 2,237,629.* The sulfonic esters of a monoethanol-

amid of coconut fatty acids are dissolved in an aqueous vehicle to produce a shampoo.

L Soaps

Aldehyde Soap Perfumes, T. Ruemele, *Seifens.-Ztg.*, **68,** *163-4, 1941.* (See item under Section B.)

Detergent and Method for Producing the Same, *U. S. Pat. No. 2,264,766.* As a new product, a sulfonated mixture consists of amides, imides, monoglycerides and diglycerides of higher molecular fatty acids. It is free from ester amides. The mixture is obtained by the reaction of from one-half molecule to one and one-half molecule of monoalkylolamine with one molecule of natural triglyceride of the fatty acids at temperatures between 200°C. and about 235°C.

Detergent Compositions, *U. S. Pat. No. 2,257,545.* A finely divided, substantially dry, detergent composition comprises a water-soluble alkaline-reacting, normally dry detergent, such as soap powder, trisodium phosphate or sodium carbonate, and a solid diluent comprising an inorganic "aerogel," such as a silica "aerogel," which exerts an anticaking action and an emulsifying and dissolving action when the composition is added to water.

Detergents, Manufacture Of, Brit. Pat. No. 521,910; through *J. Soc. Chem. Ind.*, **59,** *625, 1940.* A soap-forming fatty acid, e.g., stearic, is caused to react with a finely divided alkali silicate (apparent density not greater than 1) e.g., an intumescent sodium silicate, in substantial absence of water and in such proportions that the product contains not less than 5 per cent of soap. (Through *J. Am. Pharm. Assn.* **30.**)

Irritations of Soaps on Human Skin, Leroy D. Edwards, *Soap,* **16,** *No. 12, 33-4, 1940.* (See item under Section U.)

Laundering and Washing Compound, *U. S. Pat. No. 2,241,580.* The process of laundering goods, which comprises subjecting the goods to the usual soap treatment and to subsequent rinses to remove the major part of the soap but retaining some soap in the goods, thereupon subjecting the goods to the action of a solution, whose pH is 4 or less, of zinc silico fluoride adapted to impart an acid condition to the fabrics while forming an anti-irritant, insoluble, non-sticky precipitate with the soap material in the goods, and concluding the laundering process by separating the goods from said solution, whereby the goods at the conclusion of the laundering process are left on the acid side. (Through *Soap.*)

Medical and Toilet Soaps, *Japanese Pat. No. 130,557.* Alcohol or ether or alcohol-ether solutions of lecithin is treated with alkali carbonate and $C_{10}H_5(OH)_3$, heated in vacuo after addition of dilute hydrochloric or sulfuric acids, and the product is compounded with soaps. (Through *C.A.* **35.**)

Rapid Determination of Phenol in Soap, S. N. Semenov and M. Zaliopo, *Masloboino Zhirovoe Delo,* **16,** *No. 3, 20-1, 1940.* (See item under Section A.)

Rapid Volumetric Test for Anhydrous Soap, Wm. J. Govan, Jr., *Oil & Soap,* **17,** *262-3, 1940.* (See item under Section A.)

The Germicidal Activity of Rosin Soap and Fatty Acid Rosin Soap as Indicated by Hand Washing Experiments, W. D. Pohle and L. S. Stuart, *Oil & Soap,* **18,** *No. 1, 1941.* A modified Price procedure is used to study the germicidal action of cleansing agents on the hands. Rosin and commercial rosin containing soap are used. The result of the test indicates rosin soaps should be given wider consideration where germicidal activity is important.

Toilet Soap, *Japanese Pat. No. 130,537.* Lower-alcohol esters of fat acids obtained from seed oils of Lauraceae, such as dankobai, kuromonji or tsuzu seed oil, are used as perfume in soap. (Through *C.A.* **35.**)

TSPP Determination. (See item under Section A.)

Use of Indicators for Showing the End Point of the Swift Fat Stability Test on Lards, Robert Hubata, *Oil & Soap,* **18,** *No. 2, 37, 1941.* The keeping quality of lards using the Swift fat stability test is determined more readily by utilizing Brom Cresol Green and Alizarin Red S as indicators to denote the end of an induction period.

Zinc White in Soap, A. Foulon, *Seifen.-Ztg.*, **68,** *113-14, 1941.* Zinc white is especially suitable as a whitening agent in soap. It is available in pure form and in a very finely divided condition. In addition to whitening soap it serves as filling agent. It tends to neutralize free acidity both chemically and physically, the latter by adsorption due to the large surface area of the particles. Zinc white (ZnO) does not undergo decomposition in contact with soap. As an inert pigment it has some tendency to cut off light waves which might have a deteriorating influence on the soap. (Through *Soap* **17,** *No. 8.*)

M Dental Preparations

Actions of Tobacco on the Teeth, L. H. Strauss and J. Fockeler, *Z. klin. med.*, **136,** *468-73, 1939.* The dental effects of habitual smoking and chewing of tobacco are not merely superficial but there is nicotine penetration of the enamel, cement layer and even the pulp cavities, if there are defects in the enamel. After smoking there is a transient increase in the calcium, potassium and inorganic phosphorus content of the saliva; a few cases show a decrease in these elements. (Through *C.A.* **34.**)

Calcium Phosphate, *National Formulary, VI, Study of the Composition of Precipitated,* J. W. Millar, *Jour. A.Ph.A.*, **30,** *139, 1941.* Analyses of several specimens which conformed with purity tests indicate that the formula for precipitated calcium phosphate, $Ca_3(PO_4)_2$, given in National Formulary, VI, and in the French Codex is in error. Apparently $(Ca_3(PO_4)_2)_3 \cdot Ca(OH)_2$ more nearly agrees with the true composition. (Through *J. A.Ph.A.* **31.**)

Liquid Dentifrices Scored, anon., *Drug Trade News,* **16,** *No. 26, 28, 1941.* Liquid dentifrices result in a yellow to black shade on the teeth in certain cases, and are not superior to pastes or powders, according to the ADA. The Council also is unconvinced of the safety of a mouth wash containing sodium parahydroxymer-

curibenzoate, nor is it convinced that such a mouth wash has any advantage over any other similar preparation not containing this material.

Toothpaste, *German Pat. No. 695,-451.* A mixture is used of gelatinous magnesium silicate, compounds yielding oxygen (like perborate) with such added substances as glycerol, methylcellulose, perfume, etc. To it are added oligodynamic substances.

N Antiseptics

Antiseptic and Germicidal Paints, Samuel S. Epstein and Foster Dee Snell, *Industrial & Engineering Chemistry*, **33**, *398, 1941.* Addition of antiseptics in practicable amounts to paints has met with little success. Exceptions are chlorophenols and oxyquinoline sulfate which offer some promise. Halogenated vehicles, such as one containing 4 per cent of chlorine, added to linseed oil give the best results obtained to date. Techniques for examination are discussed in detail and modifications suggested. At best, however, antiseptic and germicidal paints are not actually so under all practical conditions of use, and further research is needed.

The Germicidal Activity of Rosin Soap and Fatty Acid Rosin Soap as Indicated by Hand Washing Experiments, W. D. Pohle and L. S. Stuart, *Oil & Soap*, **18**, *No. 1, 1940.* (See item under Section L.)

O Hair Preparations

Composition of Citrus Fruit Constituents and Boric Acid, etc., Suitable for Use as a Hair Rinse Base, *U. S. Pat. No. 255,341.* A composition is used such as may be prepared by mixing borax with lemon juice until the pH of the mixture lies between 3.4 and 3.6, allowing the juice to settle, separating the slurry, adding boric acid in approximately the amount as determined by the formula: (2.9 × weight anhydrous citric acid in juice) — weight total solids in juice — (0.528 × weight borax added) drying the mixture, mixing in 78.6 parts of boric acid moistened with 2.1 parts water for every 100 parts of boric acid mixture, and drying in a current of warm air, whereby there is produced a dry, stable product having a brilliant lemon-yellow color. (Through *C.A.* **35.**)

Filtrate Factor and Pantothenic Acid, Growth and Graying of Rats Influenced by, Gladys A. Emerson and Herbert M. Evans, *Prov. Soc. Exptl. Biol. Med.*, **46**, *655, 1941.* Calcium pantothenate stimulates growth and prevents pattern graying, but not stippling, in filtrate factor deficient rats. The requirement for growth is less than that for prevention of graying. Liver filtrate stimulates growth to a higher degree and completely prevents graying, which proves that pantothenic acid does not completely replace liver filtrate. An ether extract from cane molasses was fully active whereas a chloroform extract was inert. Inositol did not noticeably improve the activity of pantothenic acid. (Through *J. A.Ph.A.* **31.**)

Hair Dye, *Japanese Pat. No. 134,-140.* Japan wax, castor oil or camellia oil or its hydrogenated product, cholesterol and lanolin are mixed by melting, and there are added resorcinol, p-$HOC_6H_4CO_2Et$, alcohol, perfumes and persimmon tannin mixed with lamp black.

Hair Dyes, Specification 524,293, *Perfumer. Essent. Oil Record*, **31**, *314, 1940.* A method is given which consists of producing a preparation (for dyeing living hair) in the form of a stick, bar, cake, or the like, compact solid form which contains a soap and an adequate proportion of a water-soluble oxidation dye with an alkali such as ammonia or sodium carbonate and a small amount of water (this amount being insufficient to dissolve a substantial proportion of the dye intermediate) so as to form a thick paste, mixing the paste with partially dried soap chips, milling the mixture, plodding the milled product and cutting it into sticks, bars, cakes, or the like, compact solid form. (Through *J. Am. Pharm. Assn.* **30.**)

Hair Lacquer, Anon., *Drug & Cosm. Ind.*, **47**, *No. 4, 457, 1940.* A composition consisting of rosin 15 parts, sandarac 10 parts, Siam benzoin 20 parts, alcohol 50 parts and perfume 5 parts is a typical formulation that may be used to spray on the hair.

Intramolecular Folding of Polypeptide Chains in Relation to Protein Structure, Hans Neurath, *J. Phys. Chem.*, **44**, *296-305, 1940.* (See item under Section X.)

P Sun Tan Preparations

Sun Tan Products and Luminescence, Mirimanoff, *Schweiz. Apoth.-Ztg.*, **78**, *393, 1940.* The article presents a brief study of products which fluoresce and which filter out ultraviolet light and a few practical statements for use of the materials. (Through *J. Am. Pharm. Assn.* **30.**)

Q Miscellaneous

Acacia Laeta Gum from Nigeria, Anon., *Bull. Imp. Inst.*, **38**, *297-9, 1940.* The sample examined, though pale in color and of attractive appearance, was inferior in quality to Acacia senegal (= A. verek) gum, as it was not so soluble and formed gelatinous mucilages with comparatively weak solutions. It would be suitable for use chiefly by the confectionery trade. (Through *C.A.* **35.**)

Action of Vapors on Metals, Rene Dubrisay, *Bull. soc. chim.*, **6**, *1549-57, 1939.* On metal sheets exposed to sulfur or iodine in evacuated or in the latter case in open systems, deposits of various shapes (e.g., circular, elliptical) are formed, depending on the position of the metals with respect to the sulfur or iodine. (Through *C.A.* **34.**)

Antioxidants for Use with Various Foods, Etc., *U. S. Pat. No. 2,217,711.* Salts of esters of Betaine act as antioxidants for meat, oils, coffee, gums and resins.

Bromelin, *Properties and Commercial Production of. J. Ind. & Eng. Chem.*, **33**, *950, 1941.* The fate of bromelin, the proteolytic enzyme of pineapple juice, has been followed throughout the factory operations of pineapple canning. The enzyme appears in the juice and there it is remarkably resistant to heat. A method is suggested which laboratory experiments only have indicated might be

used to recover bromelin from low-grade juice without decreasing the yield of alcohol. The curious behavior of bromelin toward heating and alkali has been studied, and it was found that the activity of a bromelin preparation at a fixed pH depended upon the previous pH at which the preparation was held. The facts appear to be best explained by the assumption that the enzyme protein undergoes reversible denaturation.

Cosmetic Manual, Bath Salts, J. Kalish, *Drug & Cosm. Ind.*, **47,** *No. 6, 644, 1940.* A review of various formulations found in the literature. Twenty-five recipes are given. One formula consists of sodium pyrophosphate 25 parts, sodium sesquicarbonate 50 parts, borax 25 parts. Formulas for effervescent mixtures are included.

Recovering Sterols, *U. S. Pat. No. 2,218,971.* A crude mixture, comprising soaps, sterols and water, such as may be produced by treatment of a concentrated sterol-containing fraction of soybean oil with sodium hydroxide solution, heating to about 180°F. and further treating with calcium oxide to form a porous mass, is extracted with a solvent such as ether. Various examples with details are given.

Rust Removing Composition, *U. S. Pat. No. 2,209,291.* Metal rust may be removed by a composition of 36 parts phosphoric acid, 3 parts zinc phosphate, 2 parts gum arabic, 1 part manganese chloride, 30 parts butyl propionate and 28 parts water.

Soluble Cutting Oil and Method of Preparing the Same, *U. S. Pat. No. 2,211,250.* The oil contains a mineral oil and a minor portion of fatty material which has been sulfurized and then phosphorized. (Through *Oil & Soap*, **18,** *No. 2.)*

Specific Surface and Particle Size Distribution of Finely-divided Materials, M. N. States, *Proc. Am. Soc. Testing Materials*, **39,** *795-809, 1939.* An instrument and accessories which lend themselves to the use of a simplified procedure for fineness measurements developed by States are described. Data that are illustrative of the technique and support the theoretical conclusions are shown. (Through *C.A.* **34.**)

The Effect of Fat on Tumor Formation, H. P. Jacobi and C. A. Baumann, *Am. J. Cancer*, **39,** *338-42, 1940.* The rate of tumor production by local application of benzopyrene, methylcholanthrene or dibenzaethracene to mice was accelerated by addition of 15 per cent fat to the diet. Fat applied locally to the painted areas has less effect than fat in the diet. (Through *Oil & Soap*, **18,** *No. 2.)*

The Reaction of Hydrogen Sulfide with Sulfur Dioxide in Aqueous Solution, N. S. Nikolaev, N. A. Ivanov and K. S. Akulova, *J. Applied Chem.* (U.S.S.R.), **12,** *1013-21, 1939.* The net reaction $2H_2S + SO_2 \rightarrow 2H_2O + 3S$ was investigated at 20°. The reaction was carried out in water and in 3.5 and 15 per cent hydrochloric acid solutions. The reaction mixture was analyzed at definite periods of time, for total acidity by titrating with a base in the presence of the phenolphthalein, for acidity after oxidation of the solution with iodine (the amount of which was determined by titration with thiosulfate solution), with the same indicator, for hydrogen sulfide by formaldehyde titration ($NaHS + HCHO \rightarrow NaOH + HCHS$). The results of analysis are plotted and tabulated. On the basis of the rate of reaction the following steps of the reaction are proposed: (1) $2H_2S + SO_2 = H_4S_3O_2$ and (2) $2H_4S_3O_2 = 3S_2 + 4H_2O$. The formation of $H_4S_3O_2$ is an intermediate step only and probably is reversible. The yield of sulfur amounts to 95.0 to 100 per cent. The sulfur was coagulated with aluminum sulfate solution. (Through *C.A.* **34.**)

Waxing and Polishing Composition, *U. S. Pat. No. 2,225,392.* A waxing and polishing composition contains as a waxing constituent an N-alkyl phthalimide in which the alkyl group is a fat acid containing at least 5 carbon atoms. (Through *Oil & Soap*, **18,** *No. 2.)*

Zein—A New Industrial Protein, L. C. Swallen, *Industrial & Engineering Chemistry*, **33,** *394, 1941.* Zein, an alcohol-soluble protein, is available only as a by-product of corn processing. It is extracted commercially from gluten meal with aqueous isopropyl alcohol. The process consists of extraction, clarification, oil extraction with hexane, precipitation by water, and flash drying. Zein solvents and plasticizers have free hydroxyl, carboxyl, ketone amino, or amide groups. Usually, but not always, addition of water or secondary solvent is required. Zein is dispersed in aqueous solutions of a wide variety of soap-like compounds. Zein is cured by formaldehyde; the reaction is catalyzed by acids and promoted by ammonia or primary amines. Formamide cures zein. Zein is compatible with some highly acidic and alcohol-soluble resins. Zein is applicable to many uses, including plastics, paper coatings, adhesives, laminated board, solid color printing, films, etc.

R Oils and Fats

Antioxidants for Use with Various Foods, Etc., *U. S. Pat. No. 2,217,711.* (See item under Section Q.)

Antioxygenic Fractions of Oat and Soya Bean Flour, C. D. Dahle and D. H. Nelson, *J. Dairy Sci.*, **24,** *29-39, 1941.* An attempt was made to determine the active fraction of two antioxidants, oat flour and soya bean flour, with only partial success. The phospholipid fraction and an alcohol extract exhibited greater antioxygenic properties in dry fresh milk fat than did either the aqueous acetone, ether or hexane extracts. In every case the oat flour extracts appeared to have greater protective powers in dry fresh milk fat than the corresponding extract of soya bean flour. (Through *Oil & Soap*, **18,** *No. 2.)*

Antioxygens of Fatty Oils, XVII, Action of Unsaponifiable Matters of Soybean Oil, Mituo Nakamura and Sakan Tomita, *J. Soc. Chem. Ind., Japan*, **43,** *Suppl. binding 271-2, 1940.* The unsaponifiable matters isolated from the alcohol extract of the oil and dried in nitrogen were irradiated by ultraviolet rays at 30° for 25 hours and both the original and irradiated portions acted as antioxygens at 0.5 to 1.0 per cent concentration. The unsaponifiable obtained directly from petroleum ether and dried in the air had weak antioxygenic properties at 1.0 per cent concentration, partly because of air drying and the fact that inhibitol fractions are less soluble in petroleum ether than in ether. **XVIII, Action of Soybean Sterols on the Oxidation of**

Soybean Oil, *Ibid, 272.* The sterols isolated from the benzene-extracted crude oil when dissolved to the extent of 0.1, 0.5 and 1.0 per cent in refined oil and then irradiated produced no antioxygenic effect different from that of the oil alone. **XIX, Action of Soybean Oil Pigments and "Inhibitol" Fraction upon the Oxidation of Soybean Oil,** *Ibid, 272-3.* Lutein and inhibitol fractions are strongly antioxygenic, the former somewhat more so than the latter but both weaker than hydroquinone. Of the five amorphous xanthophylls, one was inactive and the others were weakly antioxygenic. The inhibitol concentrate is not considered to be the only natural antioxygen present in the oil. It is still uncertain whether the xanthophylls in the unsaponifiable matter are present as such or in ester or glucoside form. (Through *C.A.* **35.**)

A Simple Method for the Separation of Cholesterol and Lanosterol (from Lanolin). Tunetaro Matumoto, *Tokyohuritu Kogyo-syoreikwan Kwagaku Kenkyu Hokoku (Depts. Chem. Research, Prefectural Inst. Advancement Ind., Tokyo), No. 3, 38-46, 1940.* (See item under Section A.)

Chemical Investigations on Wool Wax, M. Lipson, *J. Council Sci. Ind. Research,* **13,** *273-7, 1940.* Wool wax extracted from the base of one fleece had acid number 4.94 and iodine number 33.5. A column of alumina adsorbed 21 per cent of the wax from hot petroleum ether-benzene solution, free fatty acids at the top, free cholesterol (6 per cent yield) halfway down and unidentified products, probably esters of higher fatty alcohols, at the bottom. Saponification of the unadsorbed filtrate gave lanoceric acid and lanosterol, with a small amount of cholesterol but no agnosterol. (Through *C.A.* **35.**)

Inhibiting the Oxidative Deterioration of Animal and Vegetable Fats and Oils, *U. S. Pat. No. 2,223,244.* Peanut or olive oil or linseed oils, etc., are stabilized by the addition of about 0.15-1 per cent of compounds such as $C_2H_5COO(CH_2)_3N(C_2H_5)_2$ or other compounds of the general formula $R_1COO(CH_2)_xNR_2R_3$, where R_1 represents hydrogen or an alkyl, alkylene, aryl, hydroxyaryl, alkoxyaryl or aminoaryl group, R_2 represents an alkyl group containing no more than 3 carbon atoms, R_3 represents hydrogen or an alkyl group having no more than 3 carbon atoms and x is an integer varying from 1 to 4. (Through *C.A.* **35.**)

Possible Applications of Wool Fat, W. Obst, *Allgem. Oel-u. Fett-Ztg.,* **37,** *285, 1940;* through *British Chem. and Physiol. Abst., June, B, II,* **190,** *1941.* Uses of natural wool grease for leather stuffing, fat-liquoring, belt dressing, for lubricating and rope greases, as a water- and acid-proofing dressing for metal, stonework, etc., and for veterinary ointment, putties, etc., are briefly indicated. (Through *J. Am. Leather Chemists Assn.* **37.**)

Refining Palm Oil or Other Glyceride Oils, *U. S. Pat. No. 2,259,698.* Decolorization of the oil is effected by treating it with a small proportion (suitably about 0.1 per cent) of hypophosphoric acid or a hypophosphite such as that of sodium at a bleaching temperature (suitably about 220-235°) under vacuum. (Through *C.A.* **36.**)

Soluble Cutting Oil and Method of Preparing the Same, *U. S. Pat. No. 2,211,250.* (See item under Section Q.)

Stabilizing Lard, *U. S. Pat. No. 2,201,292.* Lard is rendered more stable by the addition of 1-10 per cent hardened refined soybean oil.

Stabilizing Lard and Other Fats, *U. S. Pat. No. 2,198,222.* About five per cent of cacao butter is added to lard or cottonseed oil as stabilizer.

Stabilizing Mineral Oil, *U. S. Pat. No. 2,208,218.* The product is benefited by additions of hydroquinine, hydroquinidine and hydroconchonine.

Stabilizing Oils and Fats, *U. S. Pat. No. 2,205,620.* Certain components of licorice resin are used to stabilize fats and oils.

Suggested Standards for Corn Oil, E. E. Nye and J. R. Barned, *Australasian J. Pharm.,* **44,** *188-91, 1939.* It is proposed that corn oil should have $d^{15.5}$ 0.921-0.927, n^{40} 1.4665-1.4680, acid value not greater than 0.35, saponification value 181-90, unsaponifiable matter not greater than 1.25 per cent, iodine value 109-20; taste and odor should be very faint and the oil should comply with the B.P. test for the absence of cottonseed oil. (Through *C.A.* **34.**)

The Effect of Fat on Tumor Formation, H. P. Jacobi and C. A. Baumann, *Am. J. Cancer,* **39,** *338-42, 1940.* (See item under Section Q.)

S Shaving Preparations

Shaving Cream Perfuming, *Drug & Cosm. Ind.,* **49,** *546, 1941.* Most important in a shaving cream perfume is choice of fixative. As in other soaps, the resins and resinoids are valuable. Irritating materials should be avoided. Aromatics that discolor such as indol, vanillin, musk ambrette and others must be avoided.

Shaving Soap, H. J. Henk, *Deutsche Parf. Ztg.,* **27,** *129, 1941.* A review of the requirements of a shaving product. Potash soaps were found to be superior to triethanolamine soaps. Glycerin decreases lathering and should not exceed 10 per cent. Sodium and potassium lactates act as buffers, preventing irritation from alkali hydrolysis. Even glucose is such a buffer. Protein degradation products are useful too. Shaving creams with pH greater than 9.5 were destructive. The use of chromates is mentioned. Methods of preventing discoloration and spoilage are given.

T Skin Absorption

A Note on the Epidermis of the Rat on a Fat-free Diet, R. Williamson, *Biochem. J.,* **35,** *1002-5, 1941.* The epidermis of rats on fat-free diets becomes thicker, and more differentiated than that of normal rats, the stratum granulosum becoming especially distinct and the horny layer thick. When rats were fed fat-free diets with supplements of unsaturated acids the epidermis was found to be nearly normal. (Through *Oil & Soap* **19.**)

Method for Determining the Fat Content of Human Skin, K. Peukert, *Arch. Gewerbepath. Gewerbehyg.,* **10,** *53-70, 1940.* A method is described for determining the fat content of the skin and for controlling its loss

and gain by daily work and by the use of ointments. The degreasing action of lotions, ointments and bases was found to be proportional to their cleansing action and inverse to the fat acid content. (Through *C.A.* **35.**)

Skin Respiration, *A Determatological Tool*, J. C. Amersbach, L. Nutini and E. S. Cook, *Arch. Dermatol. Syphilol.*, **43**, *949, 1941*. This is a review of the literature and experimental work on the effect of vitamins, toxic materials and cosmetics on the respiration of the skin, using the Warburg manometric method of determining skin respiration.

U Dermatitis

Allergic Conjunctivitis Produced by Certain Drugs and Cosmetics, Ralph Bowen, *Southern Med. J.*, **34**, *184-191, 1941*. In an article dealing with the symptoms and treatments of allergic conjunctivities, the writer states that this condition appears in two types, vernal and non-vernal. The vernal type may be caused by drugs and cosmetics. Among the drugs, cocaine, butyn, picric acid, quinine and camphor balls were named as offenders. A brief history is given of the case involving camphor. (Through *J. Am. Pharm. Assn.* **30.**)

Irritations of Soaps on Human Skin, Leroy D. Edwards, *Soap*, **16**, *No. 12, 33-4, 1940*. A review of previous work. Soaps of coconut, palm, palm-kernel, cottonseed and avocado oils show a greater frequency of skin irritation. Tests with other refined oils do not bear out the findings with soaps of fatty acids; thus castor oil soaps are usually very irritant while those of ricinoleic acid are mild. As a result studies on the irritant action of solutions containing more than one fatty acid soap are being conducted.

Mange Remedy, *U. S. Pat. No. 2,206,520*. Use is made of an aqueous emulsion, the dispersed phase of which contains tetraethylthiuram monosulfide dissolved in a vegetable oil such as coconut oil in proportions of substantially 1:1, and the emulsifying agent of which is a solubilized casein in an amount sufficient to produce a stable emulsion, the emulsion containing as a wetting agent a salt of a sulfate of a higher aliphatic alcohol with more than 7 carbon atoms, and water so proportioned that when the emulsion is applied to a hairy portion of an animal it freely penetrates to the skin without depositing excessive and undesirable amounts of oil on the hair. (Through *J. Am. Pharm. Assn.* **30.**)

Nail Polish Dermatitis, J. F. Burgess, *Can. Med. Assoc. J.*, **45**, *336-9, 1941*. (See item under Section V.)

Salve-like Compositions for Coating the Skin to Prevent Dermatitis from the Action of Photographic Developers, *U. S. Pat. No. 2,221,139*. Cellulose acetate stearate is used in a mixture of vegetable oil having an iodine number of 125 or less to form a composition for coating the skin.

V Manicure Preparations

Nail Polish Dermatitis, J. F. Burgess, *Can. Med. Assoc. J.*, **45**, *336-9, 1941*. Nail polishes contain a basic lacquer (nitrocellulose) which appears to be the prime factor in producing a dermatitis. The presence of benzene in the nitrocellulose solution in some polishes may also produce a sensitization. (Through *C.A.* **36.**)

The Nails, M. A. Lesser, *Drug & Cosm. Ind.*, **49**, *513, 1941*. A review of the physiology, composition and treatment of nails. A formula for a nail biting preparation is given. A nail cream may be made from the following: triethanolamine 10, white petrolatum 15, white wax 5, wool fat anhydrous 5 and water 75. The article also discusses the various diseases of the nails and methods of treating them.

W Wetting and Foaming Agents

Secondary Mixed Aliphatic-Cyclic Alcohols, *U. S. Pat. No. 2,190,600*. By catalytic hydrogenation (suitably with use of a nickel-on-silica gel or nickel-chromium catalyst and by heating under high pressure), reactions are effected such as the production of bis(cyclohexylethyl) carbinol, m. 65-6° (from dibenzylideneacetone), bis(cyclohexylbutyl)-carbinol (from dicinnamylideneacetone), bis(dimethylaminocyclohexylethyl)carbinol, $b_{1.5}$-2 217-20° (from bis - dimethylaminobenzylidene)acetone, bis - methoxycyclohexylethyl)-carbinol (from dianisylideneacetone), bis(tetrahydrofurylethyl)carbinol (from difurfurylideneacetone), and a viscous oily product b_5 290-300° from dinaphthylideneacetone. The products may be used as perfumes, softening agents, etc., and solubilizing groups may be introduced into them (as by sulfonation) to produce textile assistants, etc. (Through *C.A.* **34.**)

Stabilizing Plastic Emulsions Such as Margarine and Cosmetic Creams, *U. S. Pat. No. 2,223,558*. (See item under Section G.)

Wetting Compositions Suitable for Textile Treatments, *U. S. Pat. No. 2,221,933*. Aqueous solutions are used containing diisopropylnaphthalenesulfonic acid or other nuclearly alkylated aromatic sulfonic acid, a water-insoluble alcohol containing 6 to 12 carbon atoms such as capryl alcohol, and an alkyl phenol containing at least 3 carbon atoms in the alkyl group, such as sec-amyl phenol. (Through *C.A.* **35.**)

X Permanent Waving Preparations

Hair Waving Preparation, *U. S. Pat. No. 2,154,924*. A permanent waving solution consists of 10-20 per cent of morpholine and 10 per cent of oil. The latter is emulsified by means of a higher fatty acid.

Heat Generation for the Permanent Waving of Hair, *U. S. Pat. No. 2,209,460*. A sheet of fibrous material is impregnated with a solution of copper chloride and dried. A sheet of aluminum foil is attached thereto, and the whole is used with a solution containing ammonium chloride, ammonium nitrate and sodium salicylate.

Intramolecular Folding of Polypeptide Chains in Relation to Protein Structure, Hans Neurath, *J. Phys. Chem.*, **44**, *296-305, 1940*. Spatial configurations of proteins are analyzed by using scale models with stated assumptions regarding interat. distances, optical properties and valence angles. The B-keratin structure is fully extended uniplanar

polypeptide with amino acid side-chain residues in alternate normal directions and hydrogen atoms in a spiral progression about the main chain. The side chains lie in the film surface and contribute to the area covered. However, in compressed films all the polar side-chain amino acid residues are directed into the water, and the nonpolar groups into the air. Contraction of the main chain as a result of rotations about single bonds produces a folded polypeptide called a-keratin. The folding is describable in terms of the "diamond" type and the "camphor" hexagonal configurations. These differ in respect to the resultant direction of orientation of side chains. Further folding produces the super-contracted keratin structure. Unless drastic distortions of bond angles are assumed, these contractions permit no spatial accommodation of all the side chains. Similar restrictions apply to the complete cyclization of polypeptide chains. Since contractions are indicated by experimental evidence, free rotations about C-C and C-N bonds must be limited, while the folding is probably not strictly co-planar but 3-dimensional with side-chain orientation preserved. (Through *C.A.* **34.**)

Y Flavors

Biacetyl, a Constituent Contributing to the Aroma of Tobacco Smoke, Hans Schmalfuss, *Tabak*, **3**, *19-21, July, 1939; Chem. Zentr., II, 4122, 1939.* The diketone frequently occurring in small amounts in foods and beverages was found in the absorbed liquid from tobacco continuously smoked in clay pipes and was identified as the dioxime. The biacetyl is a strong odor in the aroma of tobacco. (Through *C.A.* **35.**)

Maple Flavor, *U. S. Pat. No. 2,237,981.* Ground maple wood is extracted to produce a maple flavor.

Quantitative Recovery of Vanillin from Its Mother-Liquors, Heinz Hunger, *Seifens.-Ztg.*, **67**, *508, 520, 530, 1940.* The solubility of vanillin in hot water is about 5 per cent; 0.7 to 0.8 per cent at 15 to 16°; 0.5 to 0.6 per cent at 9 to 11°. Pure white crystals of desired sizes may be obtained by cooling the hot 5 per cent solution. The mother-liquor may be returned to the process several times. Crystals should be removed promptly to avoid yellowing. Vanillin may be recovered from the mother-liquor by (1) evaporation, (2) extraction, (3) physical precipitation, (4) chemical precipitation by addition or substitution compounds and (5) combinations of the above. In evaporating the mother-liquor at atmospheric pressure, as much as one-third the vanillin may be lost while evaporating to a 5 per cent solution. At 50 mm. absolute pressure, the loss may be reduced to 15 per cent. Three extractions of a 0.5 per cent solution with hot benzol or chloroform leave about 15 per cent of the vanillin in the aqueous phase. Physical separation by salting out is not effective. Addition of compounds, as of sodium bisulfite, is not effective for separating from dilute solutions. By addition of potassium hydroxide to form potassium vanillate, dilute solutions may be evaporated without loss and without discoloration. After evaporating, vanillin is set free by acidification (methyl orange indicator), re-washed and recrystallized. (Through *C.A.* **35.**)

Terpeneless and Sesquiterpeneless Essential Oils, Their Characteristics, Advantages and Mode of Employment, W. R. Littlejohn, *Flavours*, **3**, *No. 4, 7-18, 1940.* The chemistry of essential oils and of terpenes and sesquiterpenes is reviewed. Methods of preparation of terpeneless and sesquiterpeneless oils, their advantages and disadvantages, their use and the chemical and physical examination of these oils are discussed. Concentration, specific gravity, optical rotation, refractive index, solubility and some other characteristics are tabulated for 20 terpeneless oils and 49 sesquiterpeneless oils. (Through *C.A.* **35.**)

Z Organic Chemistry

Derivatives of Allylic Chlorides, Metathesis Reactions of Methallyl Chloride, M. Tamele, C. J. Ott, K. E. Marple and G. Hearne, *Industrial and Engineering Chemistry*, **33**, *115, 1941.* Methallyl chloride as a typical allylic chloride is extremely reactive and can be employed for the synthesis of a large number of derivatives by metathesis. Methallyl alcohol is produced on a semi-commercial scale in good yield by hydrolysis under pressure. A number of methallyl ethers have been obtained by reaction with alcohols and a variety of methallyl-substituted amines by ammonolysis. The chloride has also been reacted with metals and metal salts to form characteristic derivatives. Since methallyl chloride has been available commercially for only a short time, many of these products have not previously been prepared. The physical constants of 26 derivatives are included. Twenty-four references.

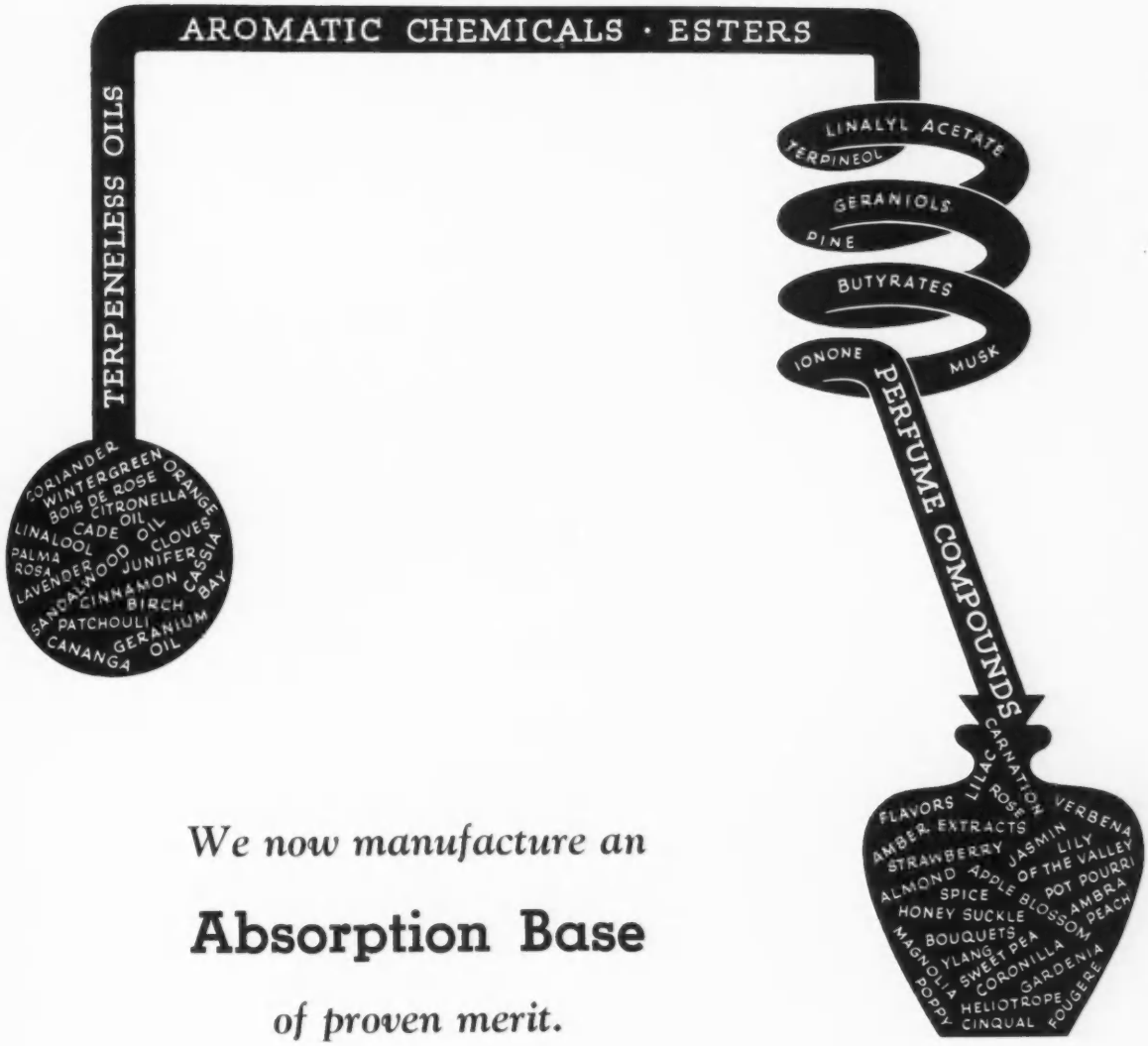
Derivatives of Allylic Chlorides, Reactions of Methallyl Chloride Involving the Double Bond, J. Burgin, G. Hearne and F. Rust, *Industrial & Engineering Chemistry*, **33**, *385, 1941.* The more important reactions of methallyl chloride which involve the double bond are discussed. Hydration to chloro-tert-butyl alcohol is accomplished readily by use of sulfuric acid at low temperatures, while higher temperatures bring about isomerication to B,B-dimethylvinyl chloride (isocrotyl chloride). Chlorination proceeds largely by substitution to form two isomeric dichloroisobutylenes, while chlorohydrination leads to dichloro-tert-butyl alcohol as the chief product. The probable mechanisms of these reactions are considered.

Glutaconic Acid, *U. S. Pat. No. 2,218,032.* Propiolic acid in solution is subjected to the action of an alkali metal or alkaline earth metal hydroxide or a water-soluble quaternary organic ammonium hydroxide such as tetramethyl ammonium hydroxide (suitably with cooling and then heating in nitrogen for several hours). (Through *C.A.* **35.**)

Octyl Alcohol and Some Derivatives, J. G. F. Druce, *Mfg. Perfumer*, **11**, *299, 1940.* (See item under Section B.)

Preparing Benzaldehyde, *Russian Pat. No. 53,810.* Toluene is oxidized with a mixture of steam and gaseous chlorine in the presence of a catalyst. (Through *C.A.* **35.**)

Rapid Acetylation Method, R. E. Regilyant, *Framatsiya, 1940, No. 5, 9-12.* (See item under Section A.)



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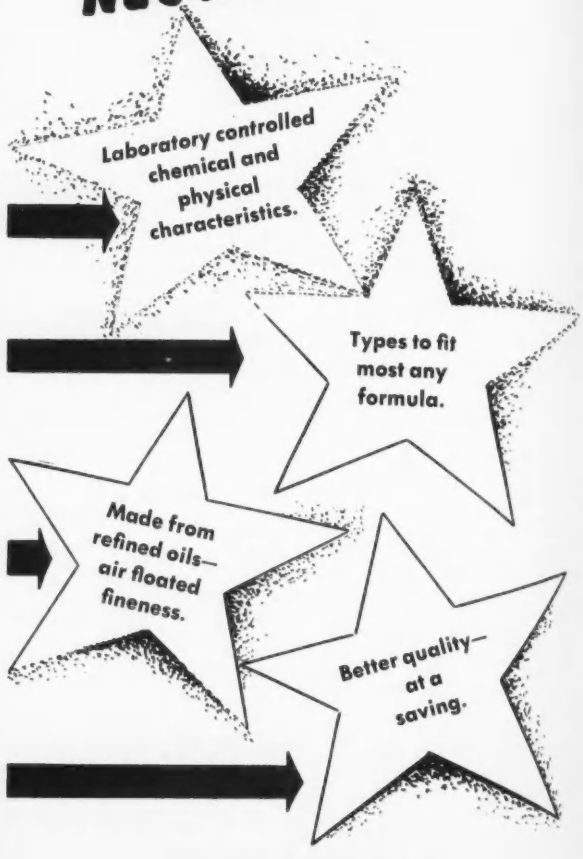
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FTC claims that Jean Vivaudou's perfumes are not made in Hawaii

A complaint issued by the Federal Trade Commission against Miahati Inc., Andrew Apicella and Jean Vivaudou trading as Oceanic Import Co. and Abbott Mfg. Co., New York, charges that claims that the perfumes offered are manufactured from hibiscus, rose, jasmin, honeysuckle, exotic woods and other ingredients from the gardens of Miahati or are made in the United States from ingredients imported from Hawaii are false. The complaint charges that all the perfume is manufactured in New York from ingredients purchased in that state. Oceanic Import Co., a partnership between Apicella and Vivaudou was succeeded by Miahati Inc. in 1940. The Abbott Mfg. Co. is an exporting firm.

Cannot claim device will permanently terminate growth of hair

Edward A. Hochbaum, trading as Lanzette Laboratories, Annette Lanzette and Lancette, Chicago, Ill., has stipulated with the FTC to cease representing through the use of the words "rid," "gone," "disappeared," "overcome" or similar expressions in connection with the removal of superfluous hair that his device will permanently terminate the growth of superfluous hair.

Obituaries

Malcolm Currie

Malcolm Currie, head of the M. C. Currie Sales Co., Los Angeles, Calif., which acts as manufacturer's representative for various firms, mostly eastern, passed away unexpectedly in his sleep in March from an unsuspected heart ailment. A respected member of the California Cosmetic Assn. and well and favorably known in cosmetic and drug circles generally, Mr. Currie was born in Canada 38 years ago. He had lived in Los Angeles for the past twenty years and was an American citizen. He is survived by Mrs. Currie and a 7-year-old daughter and his brother Jack Currie, who will give Mrs. Currie some assistance in carrying on the business.

M. R. Dinkelspiel

Dr. M. R. Dinkelspiel, an editor of Merck & Co. publications, died at his home in New York, March 13. Dr. Dinkelspiel joined the Merck organization in 1929 and made many contributions to the company's professional literature. He was an associate editor of the Merck Manual of Therapeutics and Materia Medica, a frequent contributor to the Merck Report, and a medical writer for the advertising department, also author of many articles.

Born in New York in 1875, Dr. Dinkelspiel studied at Jefferson Medical College, Philadelphia, became resident physician at the Philadelphia General Hospital and later was an instructor in ophthalmoscopy at Jefferson Medical College and at Medico-Chirurgical College.

Francis Despard Dodge

Dr. Francis Despard Dodge, chief chemist and research scientist for 50 years with Dodge & Olcott Co., died suddenly on March 15 of a heart ailment.

Dr. Francis Dodge

Dr. Dodge was born in Washington (Georgetown) D. C., the grandson of Richard J. Dodge, the latter at one time a partner in the firm of Dodge & Olcott.

At an early age Dr. Dodge came to Brooklyn to live with his grandfather, Richard J. Dodge, who started his grandson's education in Prof. Hart's Latin School in Brooklyn Heights. While in this school, Latin was stressed to the disadvantage of mathematics. From Latin School he entered the Brooklyn Polytechnic Institute. There he discovered how deficient he was in mathematics as he was graded with the lower classes while in Latin he was rated with the upper classmen. His lack of knowledge in mathematical problems became a sore spot with him and he decided to major on this very important subject—and major he did. His maternal grandfather in Washington was a professor of mathematics in the Naval Academy at Annapolis; his father, Richard D., was a civil engineer, a graduate of Rensselaer Polytechnic Institute at Troy. Dr. Dodge did not graduate from Polytechnic but from records found among his possessions he entered Columbia University, School of Mines, on their examination, at the age of 16, in the year 1884. His interest was centered on chemistry which fascinated him to such an extent that he went on to research work in this line. His specialty was in the group of aromatic chemicals, essential oils and kindred synthetic products. He not only delved into the constituents of many, many products but also the use to which they could be put to the greatest advantage. In fact he was the first to isolate Citral from Lemongrass, and this is only one of his achievements.

In 1888 Dr. Dodge received his PhB. from Columbia. Not satisfied with this degree he remained at Columbia as an assistant in organic chemistry in the School of Mines for two years and in 1890 he received his PhD. Accomplishing this great feat he went abroad in quest of further chemical knowledge, entering the University of Heidelberg and for quite a few years he spent his summers in Europe in different countries doing research work. At Heidelberg he studied for a little over a year, although his intention was to remain there for several years. Owing to the death of his grandfather, however, he was called back to America. This was in the latter part of 1891 and shortly after his return he entered the employ of Dodge & Olcott. Since then he has given to the essential oil and allied (as well as the pharmaceutical) industries endless and valuable knowledge. He imparted his findings liberally through the various chemical journals. His hobbies were microscopy and crystallography. He also had a patent on models of the atomic structure of molecules. He was one of the great research men of his time and contributed as an individual rather than as one of a group.

He applied for membership to the Chemists Club on October 25, 1900, and was accepted December 12 of the same year, sponsored by two of the most prominent scientists of the time. He was also a member of the A.A.A.S., A.C.S., A.P.A., Sigma Xi, and many other associations that pertained to chemistry and its arts. He was asked to become a member of many other societies but he felt that he could not give of his time to do them justice. He was also a member of the Long Island Historical Society.

Dr. Dodge had two loves in his life—his home and his laboratory. He was of a very retiring nature and never sought (in fact shunned) publicity or prominence. His genial and keen sense of humor won him friends in whose memory he will always linger. His motto of "Peace on earth, Good Will toward Man" cannot be improved upon and it is with much sorrow that his fellow workers meet their loss.

Mrs. C. K. Lueders

Mrs. Clothilde Kurtz Lueders, wife of the late founder of George Lueders & Co., died March 29, at Summit, N. J. Mrs. Lueders is survived by two sons, Fred and George Lueders, who are active in the business and by a married daughter, Mrs. Harry Paulsen.

George L. Michel

George L. Michel, president of Michel Cosmetics, Inc., Long Island City, N. Y., died at his home, March 7, at the age of 60 years. Before forming his own firm, he was with the George W. Luft Co.

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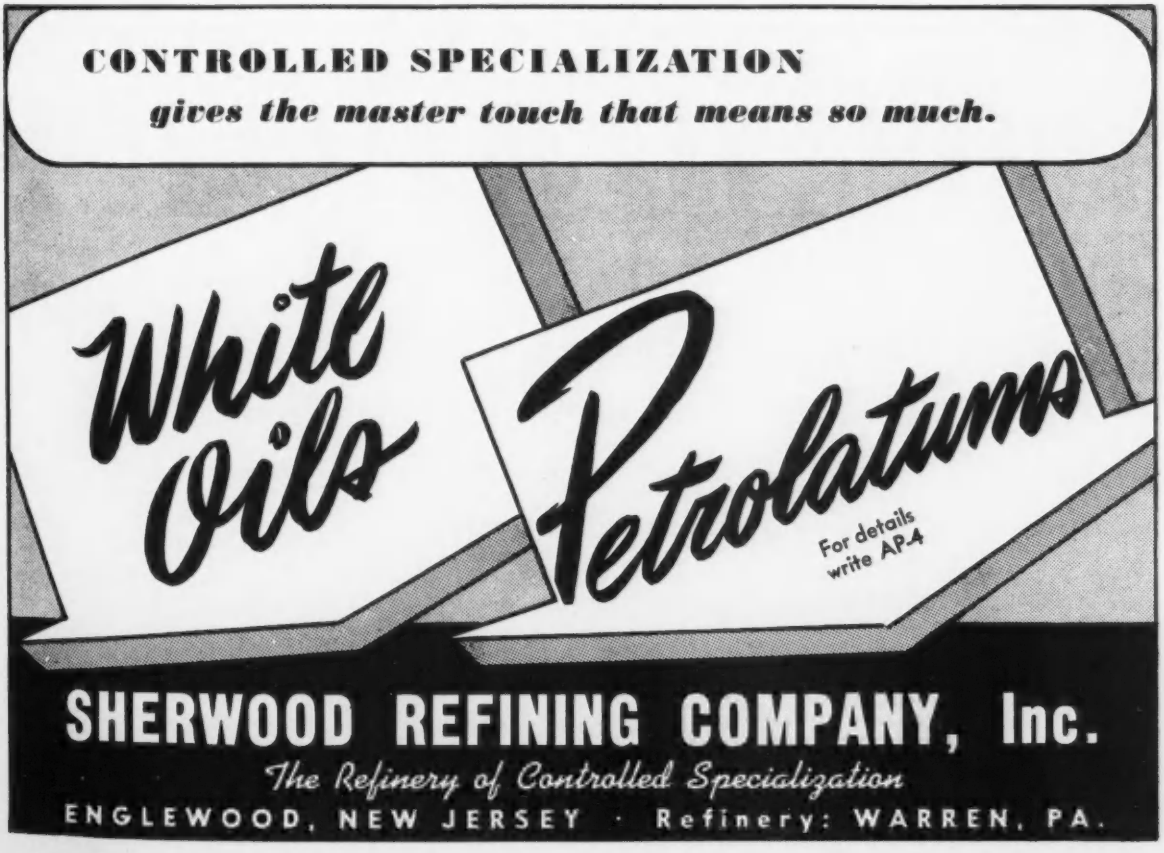

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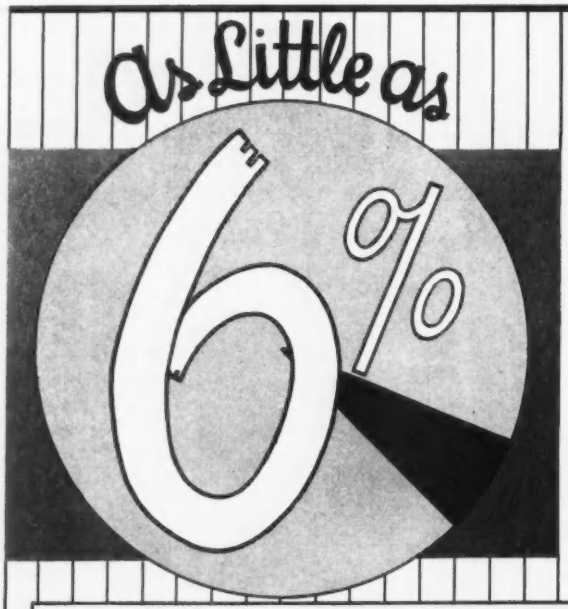

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Trade Jottings

Harriet Hubbard Ayer has a new lipstick shade for spring. It is Nerine, a brilliant red tone, designed for wear with a variety of colors. With the introduction of this shade, the firm presents a new lipstick case of plastic. A petal design in pink and blue is used.

Revlon Products Corp., in connection with its two new spring shades "1942" and "1952" is sponsoring currently a national beauty salon window display contest. The country has been divided into five territories for the competition and prizes ranging from $100 to $5 will be awarded in each area, with a total of $1125 to be expended. The contest closes May 12.

Frances Denney's new version of a lipstick kit has a musical staff motif and is called Do Re Mi. It is a bright red metal case, complete with mirror, which holds a trio of lipsticks—Watermelon for pastels, Derby Red for medium shades and Night Club for dark colors. Lipstick refills are available.

Shulton, Inc., currently is conducting a sampling campaign for its Early American Old Spice face powder through its advertisements in national magazines. The consumer is offered, for 25 cents, a paperboard vanity for handbag use, which is filled with one of three shades of powder and fitted with a mirror and puff.

The George W. Luft Co., maker of Tangee, offers a new cream rouge to match its recently introduced "satin-finish" lipstick. The rouge is presented in a transparent plastic container.

Pond's newest product is "Cheek," a dry rouge which comes in five shades to correspond with the firm's lipstick designated "Lips." The rouge is packaged in a simple brass case, matching the green of the lipstick case, and mounted on a display card. It is available in the 10-cent size exclusively.

Jaquet, in promoting its new Fire Magic make-up, is conducting a nation-wide window display contest. This new shade has inspired six hats, a lapel pin in the form of a "cigar-store Indian." as well as a new dance tune. Thousands of Fire Magic matches are being distributed by stores which sell Jaquet products.

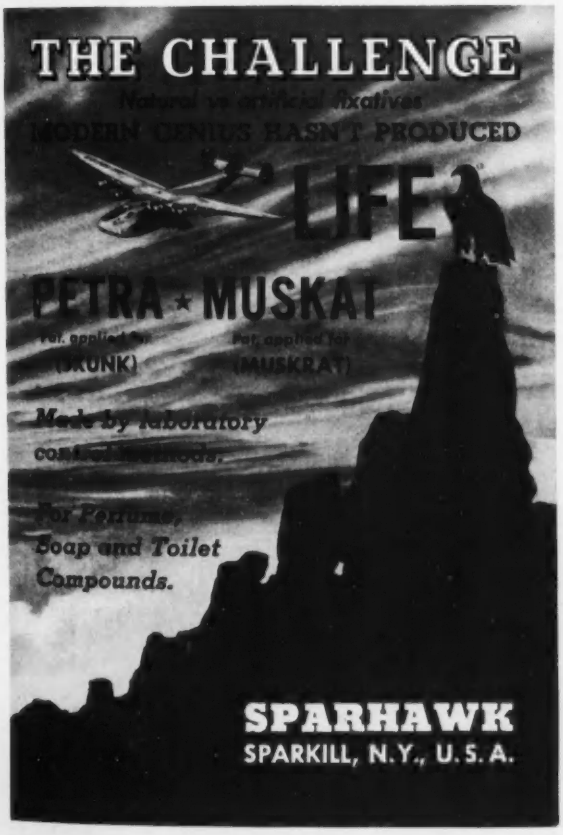
Charles of the Ritz's new Spring Rain bath line has inspired a group of accessories, boudoir costumes, jewelry, rainclothes. The Spring Rain items are cologne, dusting powder, bubble bath and soap, and the packaging takes its cue from a flower garden after a spring rain with blue as the predominating color. The Spring Rain presentations were shown to the press March 31 in a series of tableaux, one scene depicting the lives of busy women.

The Antique Shoppe has introduced a perfumed candle lamp called Candle-Scent. The candle burns and perfumes a room mildly. The lamp is a reproduction of an early American hurricane lamp and it may be used as a regular lamp with the usual type of candle. Candle-Scent is distributed by Rubicon.

Vigny's Heure Intime now has a new closure. Instead of the ground glass stopper, a modernistic screw-on plastic top is used. The Vigny line is distributed by Al Rosenfeld, Inc.

Northam Warren Corp. announces two new shades of Cutex nail polish. One is a clear red, called Alert, and the other is a brown, named Saddle Brown. "Keep 'Em Dancing" is the advertising theme behind these new shades which will be promoted by color advertisements in national magazines and *This Week* papers as well as a heavy black and white schedule.

Faberge announces that John B. Stetson has created a straw hat in honor of Straw Hat perfume. The hat, natural baku trimmed with scarlet bows, matches the Straw Hat packaging, natural straw and scarlet linen.



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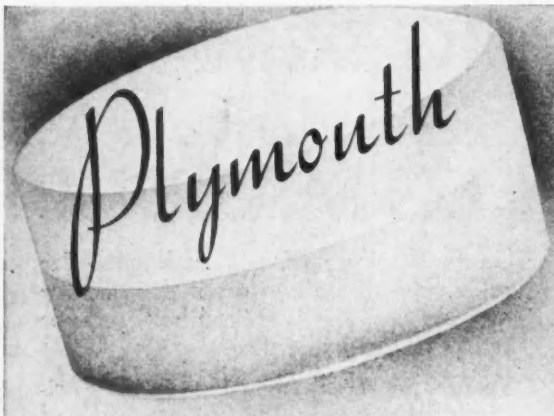

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QUOTATIONS on a number of aromatic chemicals and essential oils continued to advance. The rise in aromatics reflected the growing shortage of a number of basic materials, while the shortage of steamers to carry goods from the relatively few ports remaining open as well as higher war risk rates continued to influence the essential oil market.

PETITGRAIN OIL UP

Favorable news was mixed by reports of increased sinkings and indefinite sailings. Quotations on oil petitgrain displayed an upward trend because of increased costs. Shippers at the primary center were holding for better prices and there were higher freight and insurance rates to be considered. Some small lots of lemongrass and Ceylon citronella arrived here. They were quickly taken, however, since the arrivals found the local market with only comparatively few sellers. Oils originating in the British empire registered a series of advances over the past month with the upward trend even being extended over to sandalwood which had been gradually getting scarcer.

EAST INDIAN OIL SHIPMENTS

The question among most dealers was whether further shipments of East Indian oils made prior to the Japanese invasion would eventually arrive. It was virtually impossible to obtain any sizable quantities of Java citronella oil on spot. Dealers having small lots of vetiver oil were inclined to reserve them for the regular consuming trade or to let out only a few small parcels at much higher prices. Cananga, while registering further gains, became exceedingly difficult to obtain toward the close of the period under review.

A development of interest was a complete reversal in the trend of peppermint oil. Threat of a price ceiling had been hanging over this market for the past several months thus preventing the article from assuming its normal course.

Toward the close of last month some activity developed in the country and this was immediately reflected in quotations. It was the first upward movement in prices for some time. Equally as important came the announcement of an order being placed with an essential oil firm for menthol to be manufactured from American peppermint oil. Chemical research it was explained has developed new methods of extraction and menthol consumers are showing a desire for a purely domestic source.

PEPPERMINT HARVEST

Approximately 1,000,000 pounds of peppermint were harvested last year, but it is believed that an additional million pounds will be needed to yield the 500,000 pounds of menthol used in this country last year. In some directions it was indicated that a revision in the Pharmacopeia would perhaps go a long way in stretching the supply of peppermint oil for the manufacture of menthol which has been completely shut off from the Far East by the war. For a long time, officials in Washington, together with producers, had given much study to the possibility of increasing production of synthetic menthol. With supplies of the crude material, Java citronella oil, being shut off by the war, it is quite likely that the vast quantities of American peppermint oil will eventually be converted into menthol. The most important oil produced peppermint enjoyed a good export demand abroad prior to the outbreak of the war. In 1936 exports reached a fifteen-year record during which 386,000 pounds or more than 40 per cent of our domestic output of the oil was shipped to foreign markets all over the world.

SPICE OILS STRONG

All of the major spice oils were strong and excited. Distillers of nutmeg and clove were behind on deliveries. In view of the upset conditions prevailing in the spices because of the war most houses were inclined to hold oil for their own trade. Ginger registered a series of advances throughout the period under review and it was exceedingly difficult to locate any offers of cassia or mace.

GUM STOCKS LIMITED

Present stocks of a number of gums must take care of consumer needs for a long time to come. All imports of tragacanth and benzoin have been cut off. Some substitutes have occasionally been mentioned to take the place of gum tragacanth, but according to reports these substitutes are only being used in individual cases, and no known product has as yet been found that can be generally used in place of this material. Spot stocks of gum Arabic have become more valuable since there has been little or nothing coming in and consumption has been continuing at a good rate.

Recent rulings governing the distribution of palm, coconut and other edible oils may later be reflected in the production of glycerine though producers pointed out that it was still rather early to make any predictions. Supplies of glycerine are sufficient to take care of all urgent demands. Carload lots are being allocated and smaller quantities are moving out under affidavits or priority orders. Production of glycerine thus far this year has been running at about the same rate as last year.

Canadian association will meet in June

June 8 and 9, have been set as the dates for the annual meeting of the Toilet Goods Manufacturers Assn. in Canada.

Tombarel

CONFIDENCE in the future is not wishful thinking. It means faith in the resourcefulness of American business, faith in the essential public need for the products of this industry.

Our own confidence in the future inspired us to move to much larger quarters, where we would have greater facilities for research to meet the challenging problems which face the perfumery and cosmetic manufacturer today.

These expanded facilities and the collaboration we have received from Tombarel Freres of Grasse, France, place us in a very favorable position to render resultful service to perfumers and cosmetic manufacturers who find it necessary to make adjustments to meet changing conditions.

We cordially invite your inquiries.

TOMBAREL
Products Corporation
L. J. ZOLLINGER, PRESIDENT
12 East 22nd Street, New York, N. Y.

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TURNER WHITE METAL CO., Inc. . . . New Brunswick, N. J.

AW! G'WAN . . TRY TO SELL SOMEONE ELSE . . I'DONE QUIT SHOPPING AROUND FOR RAW MATERIALS . . . 'CAUSE I'VE FOUND A HOUSE THAT ALWAYS DELIVERS THE BEST OF WHATEVER I NEED AT PRICES THAT DON'T MAKE ME FOLD UP . . . . . AND I'LL SHOUT THE NAME!!

PRICES IN THE NEW YORK MARKET

(Quotations on these pages are those made by local dealers, but are subject to revision without notice)

ESSENTIAL OILS

Almond Bit, per lb.	$4.25	Nom'l
S. P. A.	5.25	Nom'l
Sweet True	2.85@	3.00
Apricot Kernel	.50@	.55
Amber, rectified	1.90	Nom'l
Angelica Root	150.00	Nom'l
Anise, U. S. P.	3.70@	4.00
Imitation	2.00@	2.10
Aspic (spike), Span.	5.00@	5.25
Avocado	.95@	1.00
Bay	1.65@	2.00
Bergamot	35.00	Nom'l
Artificial	4.00@	9.25
Birch, sweet	2.40@	4.25
Birchtar, crude	2.00	Nom'l
Birchtar, rectified	2.75	Nom'l
Bois de Rose	5.50@	6.00
Cade, U. S. P.	1.25@	1.35
Cajeput	2.30@	3.00
Calamus	20.00	Nom'l
Camphor, "white," dom.	.30@	.35
Cananga, Java native	18.00@	20.00
Rectified	19.00@	21.00
Caraway	15.50@	18.00
Cardamon	36.00@	40.00
Cassia, rectified, U. S. P.	11.50@	12.00
Cedar leaf	1.45@	1.50
U. S. P.	1.65@	1.70
Cedar wood	1.10@	1.25
Celery	35.00@	40.00
Chamomile	150.00	Nom'l
Cinnamon	18.00@	36.00
Citronella, Ceylon	1.75@	1.90
Java	2.50	Nom'l
Cloves, Zanzibar	1.70@	1.85
Copaiba	.85@	.90
Coriander	33.00@	35.00
Imitation	8.00@	14.00
Croton	3.00@	3.75
Cubebs	4.55@	4.60
Cumin	8.50@	11.00
Dillseed	7.50	Nom'l
Erigeron	2.20@	2.75
Eucalyptus	1.18	Nom'l
Fennel, sweet	3.50@	4.00
Geranium, Rose, Algerian	20.00@	25.00
Bourbon	25.00@	30.00
Turkish	5.75@	6.00
Ginger	22.00@	25.00
Guaiac (Wood)	5.85@	7.00
Hemlock	1.50@	1.85
Substitute	.55@	.60
Juniper Berries	15.00	Nom'l
Juniper Wood, imitation	.75@	.80
Laurel	5.00	Nom'l
Lavandin	6.00	Nom'l
Lavender, French	11.00@	15.00
Lemon, Calif.	3.25@	4.00
Lemongrass	4.00@	4.25
Limes, distilled	13.50@	14.00
Expressed	17.50@	20.00
Linaloe	3.85@	4.00
Lovage	85.00	Nom'l
Marjoram	7.50@	12.00
Neroli, Bigarde, P.	340.00	Nom'l
Petale, extra	400.00	Nom'l
Olibanum	5.75@	6.00
Opopanax	20.00@	25.00
Orange, bitter	8.00@	8.50
Brazilian	2.90@	3.25
Calif. exp.	3.25@	
Orris Root, con. (oz.)	19.25	Nom'l
Artificial	42.00@	
Orris Root, abs. (oz.)	100.00	Nom'l
Pennyroyal, Amer.	3.00@	3.50
European	3.80@	4.00
Peppermint, natural	5.50@	5.60
Redistilled	6.00@	6.10
Petitgrain	2.10@	3.00
Pimento	4.00@	8.00
Pinus Sylvestris	5.00	Nom'l
Pumillonis	4.80	Nom'l
Rose, Bulgaria (oz.)	22.00	Nom'l
Synthetic	30.00@	42.00
Rosemary, Spanish	2.50@	3.00
Sage	7.50	Nom'l
Sage, Clary	45.00	Nom'l
Sandalwood, East India	6.60@	7.00
Sassafras, natural	2.35@	2.50
Artificial	2.10@	2.35
Snake root	8.75@	10.00
Spearmint	3.20@	3.50
Thyme, red	3.00	Nom'l
White	3.50	Nom'l
Valerian	30.00	Nom'l
Vetivert, Java	48.00	Nom'l
Wintergreen	5.25@	8.50
Wormseed	3.10@	3.50
Ylang Ylang, Manila	38.00	Nom'l
Bourbon	30.00	Nom'l

TERPENELESS OILS

Bay	2.80@	3.00
Bergamot	49.00	Nom'l
Grapefruit	60.00@	65.00
Lavender	20.00	Nom'l
Lemon	25.00	Nom'l
Lime, ex.	140.00@	160.00
Distilled	87.00@	90.00
Orange, sweet	195.00@	200.00
Peppermint	12.00@	14.00
Petitgrain	3.80@	4.00
Spearmint	5.50@	6.00

DERIVATIVES AND CHEMICALS

Acetaldehyde 50%	3.85@	4.50
Acetophenone	1.90@	2.00
Alcohol C 8	16.00@	17.50
C 9	18.00@	30.00
C 10	18.50@	28.00
C 11	15.00@	20.00
C 12	8.50@	12.00
Aldehyde C 8	20.00@	28.00
C 9	25.75@	30.00
C 10	24.00@	25.50
C 11	23.00@	26.00
C 12	30.00@	35.00
C 14 (so called)	8.00@	10.00
C 16 (so called)	7.25@	8.50
Amyl Acetate	.75	Nom'l
Amyl Butyrate	1.10	Nom'l
Amyl Cinnamate	4.50@	5.80
Amyl Cinnamate Aldehyde	3.50	Nom'l
Amyl Formate	1.75	Nom'l
Amyl Phenyl Acetate	3.00	Nom'l
Amyl Salicylate	.85	Nom'l
Amyl Valerate	2.10	Nom'l
Anethol	2.75@	3.50
Anisic Aldehyde	3.85@	4.00
Benzophenone	1.30	Nom'l
Benzyl Acetate	1.50@	1.75
Benzyl Alcohol	1.85@	2.00
Benzyl Benzoate	1.25@	1.80
Benzyl Butyrate	3.25	Nom'l
Benzyl Cinnamate	6.50	Nom'l
Benzyl Formate	3.60@	4.00
Benzyl-Iso-eugenol	10.00@	11.25
Benzylidenacetone	2.25@	3.40
Borneol	2.00	Nom'l
Bornyl Acetate	2.00	Nom'l
Bromstyrol	4.00	Nom'l
Butyl Acetate	.11@	.14½
Cinnamic Acid	3.75@	4.50
Cinnamic Alcohol	12.00	Nom'l
Cinnamic Aldehyde	1.75	Nom'l
Cinnamyl Acetate	7.50@	9.25
Cinnamyl Butyrate	12.00@	14.00
Cinnamyl Formate	10.00@	13.00
Citral, C. P.	7.50@	9.00
Citronellol	8.00@	10.00
Citronellyl Acetate	4.00@	5.10
Coumarin	2.75	Nom'l
Cuminic Aldehyde	11.25@	15.00
Diethylphthalate	.24@	.33
Dimethyl Anthranilate	5.00@	6.15
Ethyl Acetate	.50	Nom'l
Ethyl Anthranilate	5.75@	7.50
Ethyl Benzoate	1.00	Nom'l
Ethyl Butyrate	.90	Nom'l
Ethyl Cinnamate	3.80@	4.10
Ethyl Formate	1.00@	1.25
Ethyl Propionate	.95@	2.00
Ethyl Salicylate	1.00@	2.00
Ethyl Vanillin	6.50	Nom'l
Eucalyptol	2.75@	3.50
Eugenol	3.25@	3.75
Geraniol, dom.	3.50@	5.00
Geranyl Acetate	3.50@	4.00
Geranyl Butyrate	4.00@	5.75
Geranyl Formate	4.25@	6.25
Heliotropin, dom.	7.00	Nom'l
Hydrotopic Aldehyde	15.00@	20.00
Hydroxycitronellal	11.50@	15.00
Indol, C. P.	31.00@	35.00
Iso-borneol	2.00	Nom'l
Iso-butyl Acetate	1.50@	2.25
Iso-butyl Benzoate	2.00@	2.75
Iso-butyl Salicylate	2.60@	5.00
Iso-eugenol	3.50@	4.50
Iso-safrol	2.65@	3.00
Linalool	7.00@	8.25
Linalyl Acetate 90%	7.25	Nom'l
Linalyl Anthranilate	15.00@	
linalyl Benzoate	10.50@	
Linalyl Formate	9.00@	12.00
Menthol, Japan	13.50@	
Chinese	13.50@	
Synthetic	12.00	Nom'l
Methyl Acetophenone	2.00	Nom'l
Methyl Anthranilate	2.80@	3.25
Methyl Benzoate	1.10@	1.40
Methyl Cellulose, f.o.b. shipping point	.60	Nom'l
Methyl Cinnamate	3.00	Nom'l
Methyl Eugenol	3.50@	6.75
Methyl Heptenone	2.50	Nom'l
Methyl Heptine Carbonate	45.00	Nom'l
Methyl Iso-eugenol	6.25@	11.50
Methyl Octine Carbonate	24.00@	30.00
Methyl Paracresol	2.50	Nom'l
Methyl Phenylacetate	2.25	Nom'l
Methyl Salicylate	.40	Nom'l
Musk Ambrette	3.85	Nom'l
Ketone	4.00	Nom'l
Xylene	1.25	Nom'l
Neroline (ethyl ester)	1.80	Nom'l
Paracresol Acetate	2.50	Nom'l
Paracresol Methyl Ether	2.50@	3.50
Paracresol Phenyl-acetate	6.50@	8.50
Phenylacetaldehyde 50%	3.75	Nom'l
100%	4.50	Nom'l
Phenylacetic Acid	2.00	Nom'l
Phenylethyl Acetate	3.00@	5.00
Phenylethyl Alcohol	3.50@	4.25
Phenylethyl Anthranilate	16.00@	
Phenylethyl Butyrate	6.50@	10.00
Phenylethyl Propionate	5.00@	6.50
Phenyl Formate	12.50@	18.00
Phenyl Valerianate	16.00@	17.50
Phenylpropyl Acet.	10.00	Nom'l
Santalyl Acetate	20.00@	22.50
Skatol, C. P. (oz.)	5.50@	8.00
Styralyl Acetate	3.50	Nom'l
Styralyl Alcohol	9.25@	12.00
Terpineol, C. P.	.40@	.45
Terpinyl Acetate	.90@	1.20

(Continued on p. 95)

Use LABELS & SEALS ooo

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The rates for advertisements in this section are as follows: Business Opportunities, $1.00 per line per insertion; Situations Wanted and Help Wanted, 50c per line per insertion. Please send check with copy. Address all communications to THE AMERICAN PERFUMER, 9 East 38th St., New York

BUSINESS OPPORTUNITY

WANTED: 2—Dry Powder Mixers; 2—Pony Mixers; 2—Tablet Machines; 1—Filter; 3—Kettles; 2—Filling Machines. No dealers. Write Box 2353, The American Perfumer and Essential Oil Review.

Colton AF#14, with automatic clipping device complete. State price and where it can be seen. No dealers. Write Box 2404, The American Perfumer and Essential Oil Review.

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1—Stokes DDS-21 punch Rotary Tablet Machine.
66—Monel and Stainless Steel Kettles, cap. 25 and 45 gals.
2—World Rotary Automatic Labeling Machines.
1—Burt straight line duplex Automatic Labeler.
1—Pneumatic Scale automatic Packaging Unit.
2—Karl Kiefer Visco Filling Machines.
3—World 1-Ermold semi-automatic Labeling Machines.
1—Cherry-Burrell No. 500 Viscolizer.
10—300 gal. Copper closed tin lined Tanks.
4—300 gal. Pfaudler jacketed Kettles, side m.d., agitators.
5—Dry Powder Mixers from 50 to 2000 lbs.
25—Aluminum, Copper, Glass Lined, jacketed and agitated Kettles.

Only a partial listing. Send us your Inquiries.

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Warehouse and Shops: 335 Doremus Avenue, Newark, N. J.

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NEW BRUNSWICK, NEW JERSEY

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Synthetic Essential Oils
Perfume Specialties
Odor Fixatives
Cosmetic Perfumes
Soap Perfumes
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Cetyl Alcohol
Cholesterol
Emulsifiers
Synthetic Waxes
Lipstick Solvents
Escalol Sunscreens
Antioxidants
Preservatives
Antiseptics
Wetting Agents
Permanent Wave Oils

Offices and Factory
57 Wilkinson Ave., Jersey City, N. J.
Los Angeles Office: 1282 Sunset Boulevard

(Continued from p. 93)

Thymene	.45@	
Thymol	3.00	Nom'l
Vanillin (clove oil)	2.60	Nom'l
(guaiacol)	2.50	Nom'l
Lignin	2.35	Nom'l
Vetivert Acetate	25.00	Nom'l
Violet Ketone Alpha	8.50@	14.00
Beta	8.50@	10.00
Methyl	6.00@	8.00
Yara Yara (methyl ester)	2.00	Nom'l

BEANS

Angostura	3.00@	3.05
Tonka Beans, Surinam	1.00@	1.25
Vanilla Beans		
Mexican, whole	16.00@	17.00
Mexican, cut	15.00@	16.00
Bourbon, whole	12.00@	14.00
South American	12.25	Nom'l
Tahiti	6.75@	7.15

SUNDRIES AND DRUGS

Acetone	.08½@	.15⅛
Almond meal	.25@	.27
Ambergris, ounce	17.00@	20.00
Balsam, Copaiba	.43@	.45
Peru	1.50@	1.75
Beeswax, bleached, pure U. S. P.	.62@	.64
Yellow, refined	.59@	.60
Bismuth, sub-nitrate	1.20@	1.22
Borax, crystals, carlot ton	55.50@	58.00
Boric Acid, U. S. P., cwt.	6.95@	7.55
Calamine	.18@	.20
Calcium, phosphate	.08@	.08¾
Phosphate, tri-basic	.09@	.10
Camphor, natural	1.65@	1.70
Domestic	.71@	.84
Castoreum	13.00@	26.00
Cetyl Alcohol	1.75	Nom'l
Pure	2.25	Nom'l
Chalk, precip.	.03½@	.06½
Cherry Laurel Water, carboy	5.75@	6.25
Citric Acid	.21	Nom'l
Civet, ounce	28.00@	49.00
Clay, Colloidal	.07@	.15
Cocoa Butter, lump	.25½@	.27
Cyclohexanol (Hexalin)	.30@	.50
Fuller's Earth, ton	15.00@	33.00
Glycerine, C. P., drums	.18¼@	.18¾
Gum Arabic, white	.42@	.45
Amber	.21@	.23
Gum Benzoin, Siam	3.50@	4.00
Sumatra	.50@	.55
Gum Galbanum	1.80@	2.00
Gum Myrrh	.60@	.65
Henna, powd.	.35@	.37
Kaolin	.05@	.07
Labdanum	3.25@	5.00
Lanolin, hydrous	.35@	.36
Anhydrous	.36@	.37
Magnesium, carbonate	.09@	.10¾
Stearate	.24@	.27
Musk, ounce	38.50@	40.00
Olibanum, tears	.25@	.30
Siftings	.09@	.13
Orange Flower Water, carboy	9.00	Nom'l
Orris Root, powd.	2.75	Nom'l
Paraffin	.06¼@	.09
Peroxide	1.10@	1.75
Petrolatum, white	.06¼@	.08½
Quince Seed	2.00@	2.25
Rice Starch	.09@	.10
Rose Leaves, red	5.45@	5.75
Rose Water, carboy	6.50@	8.00
Rosin, M. per cwt.	3.70@	
Salicylic Acid	.35@	.40
Saponin	3.00@	3.25
Silicate, 40°, drums, works, 100 pounds	.80@	1.20
Soap, neutral, white	.20@	.25
Sodium Carb. 58% light, 100 pounds	1.35@	2.35
Hydroxide, 76% solid, 100 pounds	2.60@	3.75
Spermaceti	.29@	.31
Stearate Zinc	.30@	.31
Styrax	2.25@	2.50
Tartaric Acid	.64	Nom'l
Tragacanth, No. 1	4.00@	4.75
Triethanolamine	.34½	Nom'l
Violet Flowers	1.75@	2.00
Zinc Oxide, U. S. P. bbls.	.25	Nom'l

OILS AND FATS

Castor No. 1, tanks	.13@	
Cocoanut, Manila Grade, tanks	.12	Nom'l
Corn, crude, Midwest mill, tanks	.12¾	Nom'l
Corn Oil, distilled, bbls.	.15½	Nom'l
Cotton, crude, Southeast, tanks	.12⅝@	
Grease, white	.09⅝@	
Lard	.12½@	.15
Lard Oil, common, No. 1 bbls.	.14⅜@	
Palm, Niger, drums	.09¼	Nom'l
Peanut, refined, barrels	.17	Nom'l
Red Oil, distilled, tanks	.13¼@	.14¼
Stearic Acid Triple pressed	.18½@	.19⅝
Double pressed	.15¾@	.16¾
Tallow, acidless, barrels	.13½@	.14
Tallow, N. Y. C., extra	.09⅝@	
Whale Oil, refined	.10¾@	

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SHAMPOOS
CREAMS
Etc.

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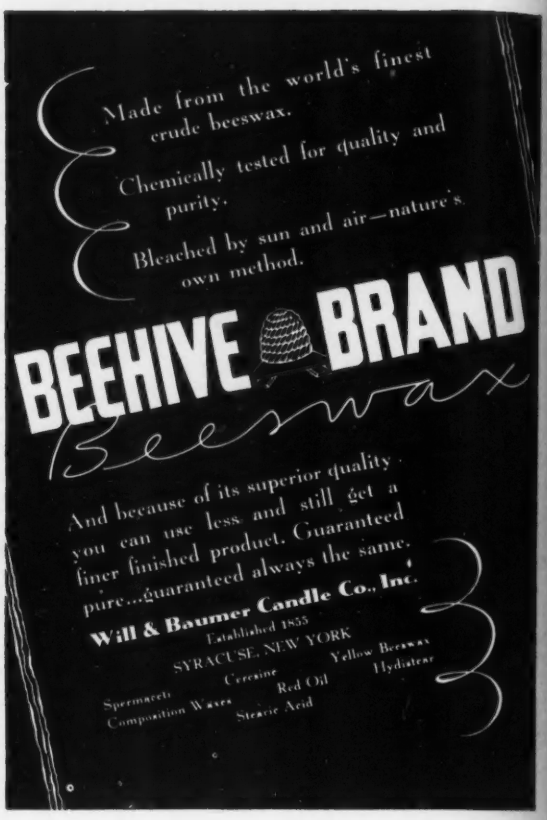
Perfumes for
CREAMS

ALL TYPES AND PRICES from $3.00 to $20.00 per pound in stock. Write for Samples and Prices.

P. R. DREYER Inc.
119 West 19th St.
NEW YORK, N. Y.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Beeswax
And because of its superior quality you can use less and still get a finer finished product. Guaranteed pure...guaranteed always the same.
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Established 1855
SYRACUSE, NEW YORK
Spermaceti
Cerosine
Yellow Beeswax
Composition Waxes
Red Oil
Hydrateen
Stearic Acid

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